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**Agriculture, Environment
and Rural Affairs**

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THE FUTURE OF UK CARBON PRICING

A joint consultation of the UK Government,
the Scottish Government, the Welsh
Government and the Department of
Agriculture, Environment and Rural Affairs in
Northern Ireland

Closing date: 12 July 2019

May 2019



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General information

Why we are consulting

To set out the UK Government's and the Devolved Administrations' preferred approach to UK carbon pricing once we have left the European Union and to seek stakeholders' views on the design of a future scheme.

Consultation details

Issued: 2 May 2019

Respond by: 12 July 2019

Enquiries to:

Emissions Trading
Department for Business, Energy and Industrial Strategy
2nd Floor, Victoria 2
1 Victoria Street
London
SW1H 0ET

Email: eu.ets@beis.gov.uk

Consultation reference: The Future of UK Carbon Pricing

Audiences:

This consultation will be of particular interest to individual companies and representatives of industrial, power and aviation sectors with obligations under the EU ETS and environmental groups. This consultation is not limited to these stakeholders; any organisation or individual is welcome to respond.

Territorial extent:

This consultation relates to future options for alternatives to the EU Emissions Trading System which operates across England, Scotland, Wales and Northern Ireland.

How to respond

Your response will be most useful if it is framed in direct response to the questions posed, though further comments and evidence are also welcome.

We encourage respondents to make use of the online e-Consultation wherever possible when submitting responses as this is the Government's preferred method of receiving responses. The e-Consultation platform can be found here

<https://www.gov.uk/government/consultations/the-future-of-uk-carbon-pricing>

However, responses in writing or via email submitted to the above addresses will also be accepted. Should you wish to submit your main response via the e-Consultation platform and any supporting information via hard copy or email, please be clear that this is part of the same consultation response.

Additional copies:

You may make copies of this document without seeking permission. An electronic version can be found at <https://www.gov.uk/government/consultations/the-future-of-uk-carbon-pricing> . Other versions of the document in Braille, large print or audio-cassette are available on request. This includes a Welsh version. Please contact us under the above details to request alternative versions.

Respond online at: <https://beisgovuk.citizenspace.com/heat/future-of-uk-carbon-pricing>
or

Email to: eu.ets@beis.gov.uk

Write to:

Emissions Trading
Department for Business, Energy and Industrial Strategy
2nd Floor, Victoria 2
1 Victoria Street
London
SW1H 0ET

A response form is available on the GOV.UK consultation page:

<https://www.gov.uk/government/consultations/the-future-of-uk-carbon-pricing>

When responding, please state whether you are responding as an individual or representing the views of an organisation.

Your response will be most useful if it is framed in direct response to the questions posed, though further comments and evidence are also welcome.

Confidentiality and data protection

Information provided in response to this consultation, including personal information, may be subject to publication or disclosure in accordance with the access to information legislation (primarily the Freedom of Information Act 2000, the Data Protection Act 1998 and the Environmental Information Regulations 2004).

If you want information that you provide to be treated as confidential please say so clearly in writing when you send your response to the consultation. It would be helpful if you could explain to us why you regard the information you have provided as confidential. If we receive a request for disclosure of the information we will take full account of your explanation, but we cannot give an assurance that confidentiality can be maintained in all circumstances. An automatic confidentiality disclaimer generated by your IT system will not, of itself, be regarded by us as a confidentiality request.

We will summarise all responses and place this summary on the [GOV.UK website](#). This summary will include a list of names of organisations that responded but not people's personal names, addresses or other contact details.

Quality assurance

This consultation has been carried out in accordance with the government's [consultation principles](#).

If you have any complaints about the way this consultation has been conducted, please email: beis.bru@beis.gov.uk.

Abbreviations Used in this Consultation

Abbreviation	Meaning
AO	Aircraft Operator
AOHA	Aircraft Operator Holding Account
ARP	Auction Reserve Price
AVR	EU Accreditation and Verification Regulation
BEIS	Department for Business, Energy and Industrial Strategy
CAA	Civil Aviation Authority
CCA	Climate Change Act
CCC	Committee on Climate Change
CCM	Cost Containment Mechanism
CIMs	Community Implementation Measures
CJEU	Court of Justice of the European Union
CLEF	Carbon Leakage Exposure Factor
CLL	Carbon Leakage List
CO ₂	Carbon Dioxide
CORSIA	Carbon Offsetting and Reduction Scheme for International Aviation
CRC	Carbon Reduction Commitment
CSCF	Cross-Sectoral Correction Factor
DA	Devolved Administration
EA	Environment Agency
ECA	European Communities Act 1972
EEA	European Economic Area

ESOS	Energy Saving Opportunities Scheme
ESP	Enforcement and Sanctions Policy
ETSWAP	Emissions Trading Scheme Workflow Automation Project
EU	European Union
EU ETS	European Union Emissions Trading System
EUAAs	EU Aviation Allowances
EUAs	EU Allowances (allowances used within the EU ETS)
FAM	Free Allocation Methodology
FAR	EU Free Allocation Regulation
FCA	Financial Conduct Authority
GHG	Greenhouse Gas
HAL	Historic Activity Level
ICAO	International Civil Aviation Organisation
LRF	Linear Reduction Factor
MAR	EU Market Abuse Regulation
MiFID	EU Markets in Financial Instruments Directive
MMP	Monitoring Methodology Plan
MRR	EU Monitoring and Reporting Regulation
MRV	Monitoring, Reporting and Verification
MSR	Market Stability Reserve
MW	Megawatt
NER	New Entrants Reserve
NIEA	Northern Ireland Environment Agency
NIMs	National Implementation Measures

NRW	Natural Resources Wales
OHA	Operator Holding Account
OPRED	Offshore Petroleum Regulator for Environment and Decommissioning
PPCA	Pollution Prevention and Control Act 1999
SAM	Supply Adjustment Mechanism
SARPs	Standards and Recommended Practices
SEPA	Scottish Environment Protection Agency
SI	Statutory Instrument
t CO ₂ eq	Tonne CO ₂ equivalent
tkm	Tonne-kilometre
UK ETS	United Kingdom Emissions Trading System

Executive Summary

As we leave the European Union, the UK Government and the Devolved Administrations are firmly committed to carbon pricing as an effective tool for achieving our carbon emissions reductions targets. As set out in the Clean Growth Strategy, our future approach will be at least as ambitious as the current EU Emissions Trading System (EU ETS) and will provide a smooth transition for relevant sectors.

Building on the Political Declaration, which considered cooperation between the UK Government and the EU through establishing a UK national greenhouse gas emissions trading system (UK ETS) linked to the EU Emissions Trading System (EU ETS), a linked UK ETS is the UK Government's and the Devolved Administrations' preferred carbon pricing option. Establishing a linked ETS has the significant benefit of creating a larger carbon market which will deliver more cost-effective emission reduction opportunities for UK businesses. **Securing a linking agreement with the EU for a linked UK ETS is therefore our preferred option.**

However, in the unlikely event that a linking agreement cannot be secured, alternative carbon pricing options must also be considered. These include: a standalone domestic emissions trading system; a tax on carbon, similar to the policy described in the HMRC technical note "Carbon Emissions Tax"¹; or participating in Phase IV of the EU ETS. We are not consulting in detail on a tax on carbon in this document. However, if necessary, responses to this consultation may be used to develop work on such an alternative.

This consultation therefore also includes questions relevant to a standalone UK ETS or a tax on carbon. The proposals in Chapters 1-3 would be applicable for either a linked or standalone UK ETS unless clearly stated otherwise. Chapter 3 focuses on UK ETS proposals specific to the aviation sector. Chapter 4 covers the UK's legal obligations relating to the possible implementation of Phase IV of the EU ETS.

Chapter 1 focuses on proposals for the design of a linked or standalone UK ETS which covers: the scope in terms of gases and sectors; the cap and trajectory; the distribution of allowances; free allocation; supply flexibility; phases and reviews; the small emitter opt-out; and the ultra-small emitter exemption; and a UK industrial decarbonisation fund.

- To ensure that any UK ETS is linkable to the EU ETS, we propose that the **scope** of a UK ETS match that of the EU ETS both in respect of sectors and greenhouse gases covered. We also seek views on the potential to expand scope in later years of UK ETS operation.
- For the **cap and trajectory**, the UK ETS Appraisal at Annex A considers the potential impacts to UK businesses and society of different levels of ambition in a UK ETS

¹https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/752093/Carbon_Emissions_Tax_Sup_doc.pdf

compared to the EU ETS. We are seeking views on the impacts set out and the factors to be considered in setting the cap.

- On **market stability**, we have set out mechanisms to respond to significant annual allowance supply and demand imbalances as well as significant price volatility.
- For the **distribution of allowances**, we propose to follow the EU approach of offering allowances principally by means of auctioning, but also to provide free allocation in order to mitigate the risk of carbon leakage.
- For the **free allocation of allowances**, we propose to broadly follow the free allocation methodology used in the EU ETS to provide a smooth transition for the relevant sectors and to support the potential for linking a UK ETS with the EU ETS.
- The proposals for a **Small Emitter and Hospitals Opt-out Scheme and an Ultra-Small Emitter Exemption** also align with the EU ETS, including setting a threshold of 25,000t CO₂eq/35MW and 2,500t CO₂eq respectively.
- We also seek views on the possibility of monetising allowances from within the UK ETS to **fund UK industrial decarbonisation**.

Chapter 2 sets out proposals for the main processes involved in the operation of a UK ETS. There are a number of proposals that we consider offer significant benefits to participants by reducing the administrative burden on operators through improvements to the compliance processes and simplification of the usage of a new UK Registry.

- We propose that the process of **auctioning allowances** in a linked system should remain the same as it is now. In a standalone UK ETS system, we make proposals for improving the steadiness of allowance flow into the system.
- Overall **governance** for the system is included for information only. Whilst governance for a linked system is subject to negotiation, the intention is that the framework currently in place for the EU ETS would broadly be replicated for a UK ETS within the appropriate legislative structures.
- The management of allowances is also outlined, including rules on **banking and 'borrowing'** over compliance years and the approach to **enforcement** of the rules (including penalties and the appeals process).

Chapter 3 covers proposals on the design and operational elements particular to the aviation sector.

- We propose that both a linked and a standalone UK ETS include aviation in line with the Clean Growth Strategy commitment to be at least as ambitious as the EU ETS, and to facilitate linking.
- The **scope** in both a linked and a standalone UK ETS should include domestic UK flights, flights from the UK to the EEA and flights from the UK to Switzerland.
- The aviation component of the **cap** would be calculated to ensure that it is at least as ambitious as our proportional share of the EU ETS cap.

- The aviation **Monitoring, Reporting and Verification** rules would mirror those of the EU ETS Phase IV.
- The **free allocation methodology** would mirror that of the EU ETS Phase IV.
- In a linked UK ETS, the **exemption rules** would mirror those of the EU ETS. The relevant thresholds (10,000t CO₂ for commercial operators and 1,000t CO₂ for non-commercial operators, and 243 flights for each of three consecutive four-month periods) would apply to flights arriving and/or departing in the EEA and the UK, marking no change from the current approach.
- In a standalone UK ETS, the **thresholds** would be scaled down and apply to the scope of the UK ETS only. This would avoid placing obligations on operators with few flights from the UK.
- We recognise that aircraft operators will also have obligations under the UN International Civil Aviation Organisation's (ICAO) global offsetting scheme, CORSIA. In light of this, we propose:
 - That operators should not pay twice for the same tonne of CO₂;
 - That Phase I of a UK ETS with respect to aviation be split into two sub-phases: 2021-2023 and 2024-2030, in order to accommodate any amendments for CORSIA without disrupting the overall proposed phase structure (see Chapter 1).
- We are also considering:
 - Postponing the first UK ETS annual compliance deadline for aircraft operators by at least one year;
 - Allowing aircraft operators to use CORSIA offset units to meet all or part of their UK ETS obligations;
 - The possibility of sharing data between states to reduce reporting burdens.

Chapter 4 covers the scenario whereby the UK remains part of Phase IV of the EU ETS past 2020. While this is not the UK Government's preferred position, it is prudent to include information on Phase IV, in this consultation. While the UK is still within the EU or within the Implementation Period, the UK has an obligation to transpose the Phase IV revisions to the EU ETS Directive into UK law before 9 October 2019. The chapter also includes proposed Phase IV implementation features which may be incorporated within a UK ETS. Chapter 4 seeks views on:

- The **timing and method of this transposition** (and further transposition arising as a result of tertiary legislation not yet agreed at EU level);
- Elements of Phase IV where the UK has discretion over whether and how to implement – most notably the **opt out schemes for small emitters**, which we are proposing would also be implemented as part of a linked or standalone UK ETS;
- Further changes to the implementation of the EU ETS in the UK to make it more effective and less burdensome for operators and regulators.

Introduction

As we leave the European Union (EU), the UK will maintain its commitment to both domestic and international efforts to tackle climate change. The UK's legal commitments to emissions reduction are more stretching than our current obligations under EU law. The Climate Change Act 2008 set the UK's target to reduce greenhouse gas emissions by at least 80% compared to 1990 levels by 2050 and established a framework of carbon budgets which place successive five-yearly limits on emissions from the UK to meet the long-term target. Additional legislative frameworks and targets exist in the Devolved Administrations.

The Environment (Wales) Act 2016 sets a long-term target to reduce emissions by at least 80% compared to 1990 levels by 2050 and subsequent secondary legislation establishes interim targets for 2020 (27%), 2030 (45%) and 2040 (67%). The Climate Change (Scotland) Act 2009 sets a long-term target to reduce emissions by 80% compared to 1990 levels by 2050. The Scottish Government has introduced a Bill to increase this to 90% and committed to setting a statutory target date for net-zero emissions of all greenhouse gases as soon as this can be done credibly and responsibly. The Committee on Climate Change is due to publish advice on UK, Scottish and Welsh targets on 2 May. Should the Committee advise that Scotland can now go even further, the Scottish Government has committed to acting on that advice.

The UK was one of the first countries to recognise and act on the economic and security threats of climate change. Since 1990, the UK has reduced greenhouse gas emissions by over 40% while growing the economy by more than two thirds. This is the most substantial emissions reduction of any G7 state, over a period when UK economic growth was above the G7 average.² The UK established Europe's first Emissions Trading Scheme in 2002, which served as a pilot for the European Union Emissions Trading System (EU ETS) and established London as a global centre of carbon trading.

Moreover, the UK has long been an advocate of the development of carbon markets internationally and played a leading role in the negotiations to agree reforms for the next phase of the EU ETS (2021-2030) and in the development of the Paris Agreement. Carbon pricing schemes are being established around the world: as of 2018, 51 carbon pricing initiatives had been established or scheduled for implementation globally, covering around 20% of global greenhouse gas emissions. Of these, 25 are emissions trading systems.³ The UK Government and the Devolved Administrations remain fully committed to driving up global ambition on carbon pricing and promoting carbon markets as a credible vehicle for delivering that ambition.

² Committee on Climate Change (2018) Reducing UK Emissions: 2018 Progress Report to Parliament <https://www.theccc.org.uk/wp-content/uploads/2018/06/CCC-2018-Progress-Report-to-Parliament.pdf>

³ World Bank; Ecofys (2018) State and Trends of Carbon Pricing 2018 <https://openknowledge.worldbank.org/bitstream/handle/10986/29687/9781464812927.pdf?sequence=5&isAllowed=y>

As we leave the EU, we remain firmly committed to carbon pricing as an effective emissions reduction tool. In the UK Government's 2017 Clean Growth Strategy, the UK Government made a **commitment that our future approach would be at least as ambitious as the existing system, the EU ETS, and provide a smooth transition for relevant sectors.**

The Scottish Government's third climate change plan sets a course to modernise and transform the economy over the next 15 years by incentivising industry to invest in decarbonisation measures that will enhance energy productivity. Since launching in March 2015, the Scottish Government's Low Carbon Infrastructure Programme has awarded over £40 million of funding to 14 demonstrator projects supporting low carbon energy generation and supported the co-development of over 30 proof of concept and development proposals.

On 21 March, the Welsh Government published Prosperity for All: A Low Carbon Wales,⁴ a robust and detailed cross-government plan to cut emissions and contribute to the global fight against climate change. It sets out how Wales will meet its first carbon budget and lays the foundations for achieving its target of reducing greenhouse gas emissions from Wales by at least 80% by 2050 against 1990 levels. It sets out 100 priorities and policies across all areas of government, including policies to transform the power sector and to support research and development into longer-term, transformational changes to our industries while encouraging continued short term, incremental improvements.

Northern Ireland contributes towards the UK climate change targets and carbon budgets. In addition, the Northern Ireland Civil Service work programme includes the objective to 'live and work sustainably, protecting our environment' with greenhouse gas emissions reductions being used as one of the indicators to help monitor progress. The work programme sets out the priorities to be pursued in the current year, setting real-world objectives on how policies make a difference.

Building on the Political Declaration which considered cooperation between the UK Government and the EU through establishing a UK national greenhouse gas emissions trading system (UK ETS) linked to the EU Emissions Trading System (EU ETS), a linked UK ETS is the UK Government's and the Devolved Administration's preferred carbon pricing option. As well as increasing the efficiency of the system due to the benefit of a larger carbon market, a link between a UK ETS and the EU ETS would deliver more cost-effective carbon reduction opportunities and a smooth transition for UK businesses in the traded sectors.⁵

We are committed to the delivery of a carbon pricing mechanism even in the event that linking to the EU ETS cannot be achieved. The UK Government therefore needs to consider alternative "fall-back" domestic carbon pricing policies. Fall-back options include the UK introducing its own domestic trading system, which would not be linked to the EU ETS; the introduction of a tax on carbon, similar to the policy described in the HMRC technical note

⁴ <https://gweddiill.gov.wales/docs/desh/publications/190321-prosperity-for-all-a-low-carbon-wales-en.pdf>

⁵ The traded sector consists of all industries that currently participate in the EU ETS, the non-traded sector consists of all industries that do not participate in the EU ETS.

“Carbon Emissions Tax”;⁶ and participating in Phase IV of the EU ETS. Fall-back options do not preclude the opportunity to achieve a linked carbon pricing system in the future. We are not consulting in detail on a tax on carbon in this document but, if necessary, responses to this consultation may be used to develop work on this alternative.

Approach to Carbon Pricing in the UK: Options covered in this Consultation

A Linked UK Emissions Trading System (linked UK ETS)

Any linking agreement requires a UK ETS to which the EU ETS could link. It is therefore necessary to develop a UK ETS in the first instance. When two ETSs are linked, each system recognises the allowances of the other. This has the effect of creating a single carbon price across both systems. Linking carbon markets can lead to more efficient emissions reduction, since allowances are tradable across a larger pool of participants. This results in a larger number of cost-effective abatement opportunities, as well as greater market liquidity for trading purposes, ensuring lower transactional costs and minimising the risk of market abuse. As well as increasing the efficiency of the system, a link between a UK ETS and the EU ETS would ensure a smooth transition for the relevant sectors. Given that a linking agreement would be subject to negotiation, it is not possible to outline the precise details of such an agreement at this stage.

A standalone UK ETS

A UK ETS could operate independently, including ahead of securing a linking agreement. We have included proposals in this document that apply to both a linked and a standalone UK ETS. Where different approaches would apply under a linked or a standalone UK ETS, this is highlighted under the relevant sections.

In order to facilitate a smooth transition for industry and maximise the potential for linking, we are proposing to initially limit the areas of deviation from the EU ETS to those where the benefits to business of changes outweigh those of alignment. Limiting the number of changes in a standalone UK ETS compared to the current EU ETS provides greater continuity for business during the transition between the two systems.

However, it is important that we keep UK ETS rules under review. We propose to carry out an initial review in 2023 to ensure that the system is operating as intended and aligns with the Paris Agreement review with any necessary changes implemented for 2026. Changes for the start of Phase II in 2031 will be determined by a mid-Phase review, which will be updated in line with the Paris Agreement review process.

⁶https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/752093/Carbon_Emissions_Tax_Sup_doc.pdf

A Tax on Carbon

If a linking agreement could not be concluded successfully, the UK Government is also considering the potential of a tax on carbon as an alternative to a standalone UK ETS. The Carbon Emissions Tax (CET) announced at Budget 2018 could form the initial basis of a tax alternative to the EU ETS. If a tax were pursued as a long-term carbon price policy, the UK Government would consult on options. Development of any carbon tax would be a reserved matter for the UK Government.

The CET was designed to work in a similar way to the EU ETS. It would cover all stationary installations currently within the EU ETS. These would continue to report their activities annually under the existing Monitoring, Reporting and Verification (MRV) scheme to establish how many tonnes of greenhouse gases they emit during the reporting period. Each installation would be set an emissions threshold, based on their level of free allowances in the ETS. Thus, the tax would be based on the number of reported emissions exceeding the installation's emissions allowance. A 'Carbon Emissions Tax Technical Note' was published by HMRC⁷ alongside the Budget and provides further detail.

There are a number of areas where the UK Government would want to consider changes to the CET if it were to design a long-term alternative tax. For example, the UK Government would want to explore means for providing an incentive for installations to reduce emissions below their emissions threshold. The UK Government would also want to explore how the rate would be set and how to ensure that businesses would have sufficient certainty on the future level of the rate.

As such, many of the questions in this consultation, such as on monitoring, reporting and verification and the allocation of free allowances, would also be relevant to the design of a tax alternative. We intend that relevant agencies which currently undertake monitoring, reporting and verification functions under the EU ETS, such as the System Administrator and the Regulators (which comprise the Environment Agency, the Scottish Environment Protection Agency, Natural Resources Wales, Northern Ireland Environment Agency, and the Department for Business, Energy and Industrial Strategy in its role as Offshore Petroleum Regulator for Environment and Decommissioning), would continue undertaking these functions.

Phase IV of the EU ETS

We are not seeking views regarding the attractiveness or otherwise of the option of remaining in the EU ETS on an ongoing basis – the UK Government's preferred approach is to seek to establish a UK ETS linked to the EU ETS following the end of EU ETS Phase III. However, it is prudent to include consideration of Phase IV in this consultation. As a current member of the EU, the UK is required to transpose the Phase IV revisions to the EU ETS Directive into UK law before 9 October 2019.

⁷ <https://www.gov.uk/government/publications/carbon-emissions-tax-technical-note>

Chapter 4 of this consultation seeks stakeholder views on the UK Government's and the Devolved Administrations' proposals for how we would implement Phase IV of the EU ETS should the UK remain a member of the EU ETS beyond 2020. Issues covered include the implementation of schemes for small emitters and changes to improve the UK implementation of the EU ETS (including changes to penalties). Many of these changes would also be implemented as part of a UK ETS.

In comparison to the proposals contained in Chapters 1-3, the proposals contained in Chapter 4 are specific and technical provisions necessary to fulfil our business as usual obligations as a current participant in the EU ETS.

Single Electricity Market

We recognise the importance of a consistent carbon price on the island of Ireland for the Single Electricity Market (SEM). The UK Government's and the Devolved Administrations' preferred approach – of establishing a UK ETS that is linked to the EU ETS – would deliver carbon price harmonisation and allow the market to function at an optimum level. In any scenario, we will aim to ensure that carbon pricing does not hinder the effective operation of the SEM.

This Consultation Document

In this consultation document, the UK Government and the Devolved Administrations are seeking views on whether our proposals are appropriate, proportionate and workable for participants. We are also seeking views on what the likely impacts of these proposals would be, based on our appraisal in Annex A. The proposals, and your feedback on them, will enable the UK Government and the Devolved Administrations to develop informed legislation. Your views may also inform discussions with the EU on a linked UK ETS.

In the absence of Northern Ireland Ministers, any future policy decisions to be made in respect of Northern Ireland may be taken by a senior officer of the Department of Agriculture, Environment and Rural Affairs in Northern Ireland, in accordance with the Northern Ireland (Executive Formation and Exercise of Functions) Act 2018 and the guidance published by the Secretary of State under section 3 of that Act.

Separate to this consultation, the UK Government and Devolved Administrations will be writing to the Committee on Climate Change (CCC) to request advice pursuant to s48(1) and s48(2) of the Climate Change Act 2008 (CCA), on establishing both a standalone UK ETS and a UK ETS linked to the EU ETS.

Chapter 1 sets out the main design proposals for a UK ETS (covering both a linked and a standalone UK ETS.)

Chapter 2 sets out proposals for how a UK ETS would operate together with some improvements – compatible with our preferred outcome of establishing a linked UK ETS – which we plan to introduce to the operation of the system to reduce burdens on business.

Chapter 3 sets out proposals for how the UK ETS would apply to the aviation sector.

Chapter 4 sets out how we propose to fulfil our legal obligations as a current member of the EU ETS regarding transposition of the Phase IV revisions to the EU ETS and legislate for further improvements to the implementation of the EU ETS in the UK. Many of these changes would also be applied as part of a UK ETS (linked or standalone).

Catalogue of Consultation Questions

Consultation Questions	
CHAPTER 1: Design of a UK Emissions Trading System	
1	<ul style="list-style-type: none"> a) Are you a current participant of the EU ETS? (Y / N) b) If you are a participant or a representative of a sector, which sector do you belong to? c) If you are not a participant or a representative of a sector, which interest group do you represent?
2	<p>Does your interest in the ETS relate to the operation of the system in a particular geographical area?</p> <ul style="list-style-type: none"> a) England b) Wales c) Scotland d) Northern Ireland e) UK-wide
3	<ul style="list-style-type: none"> a) Do you agree with the proposed scope of a UK ETS? (Y/N) b) Please expand on your answer, providing evidence in support of your response where possible.
4	<ul style="list-style-type: none"> a) Do you have any suggestions for which sectors might be included in scope in the future? (Y/N) b) Please expand on your answer, providing evidence in support of your response where possible.
5	<ul style="list-style-type: none"> a) Do you agree that costs to business alongside climate ambition are the appropriate ones to be considered for the final decision on setting the cap and trajectory? (Y/N) b) What other factors should be prioritised in the setting of the cap and trajectory? c) Please expand on your answer, providing evidence in support of your response where possible.

6	What would the implications be for your business if the cap for a standalone UK ETS was set at a tighter level than the UK's anticipated notional share of the EU ETS cap?
7	<p>a) Do you agree with using the EU ETS Phase IV Carbon Leakage List and Benchmarks for determining UK ETS free allocation? (Y/N)</p> <p>b) Please expand on your answer, providing evidence in support of your response where possible.</p>
8	<p>a) Do you agree with using the Phase IV approach to the Carbon Leakage Exposure Factor for a UK ETS? (Y/N).</p> <p>b) Please expand on your answer, providing evidence in support of your response where possible.</p>
9	<p>a) Do you agree with the process and measures to mitigate the risk of a Cross-Sectoral Correction Factor being applied? (Y/N)</p> <p>b) Please expand on your answer, providing evidence in support of your response where possible.</p>
10	<p>a) Do you agree with the proposals for the operation of a UK ETS New Entrants Reserve, including for production increases and decreases? (Y/N)</p> <p>b) Please expand on your answer, providing evidence in support of your response where possible.</p>
11	<p>a) Do you have any further comments regarding our approach to free allocation? (Y/N)</p> <p>b) Please expand on your answer, providing evidence in support of your response where possible.</p>
12	<p>a) Do you agree with the concept of introducing a SAM, similar in function to the EU ETS MSR, for a UK ETS? (Noting that a SAM cannot be operational immediately and we will consult on the specific details at a later date.) (Y/N)</p> <p>b) Please expand on your answer, providing evidence in support of your response where possible.</p>
13	What factors should be considered when setting the thresholds for a standalone UK ETS SAM?
14	What factors should be considered in determining at what point in Phase I of a standalone UK ETS a SAM should be introduced?

15	<p>a) Do you agree that the proposed CCM strikes the appropriate balance between effectively addressing in-year price spikes without responding too frequently to shorter term upward price fluctuations, thereby avoiding market disruption? (Y/N)</p> <p>b) Please expand on your answer, providing evidence in support of your response where possible.</p>
16	<p>a) Should a transitional Auction Reserve Price be implemented to provide minimum price continuity during the transition from the EU ETS to a UK ETS? (Y/N)</p> <p>b) Please expand on your answer, providing evidence in support of your response where possible.</p>
17	<p>a) Do you agree with the proposed approach to phases? (Y/N)</p> <p>b) Please expand on your answer, providing evidence in support of your response where possible.</p>
18	<p>a) Do you agree with the proposed approach to reviews? (Y/N)</p> <p>b) Please expand on your answer, providing evidence in support of your response where possible.</p>
19	<p>a) Do you support the implementation of a Small Emitter and Hospitals Opt-Out Scheme in a UK ETS for installations emitting less than 25,000t CO₂eq p.a. and having a thermal input less than 35MW with the same design as the Article 27 Scheme proposed by the UK under the EU ETS for Phase IV? (Y/N)</p> <p>b) Please expand on your answer, providing evidence in support of your response where possible.</p>
20	<p>a) Do you have any other comments on our proposals for a Small Emitter and Hospitals Opt-Out Scheme in a UK ETS, not covered by your responses to questions in Chapter 4? (Y/N)</p> <p>b) Please expand on your answer, providing evidence in support of your response where possible.</p>
21	<p>a) Do you support an Ultra-Small Emitters Exemption for installations emitting less than 2,500t CO₂eq per annum? (Y/N)</p> <p>b) Please expand on your answer, providing evidence in support of your response where possible.</p>

22	<p>a) Do you have any other comments on our proposals for an Ultra-Small Emitters Exemption in a UK ETS? (Y/N)</p> <p>b) Please expand on your answer, providing evidence in support of your response where possible.</p>
23	<p>a) Do you agree with the proposed mechanism for recalculating the system-wide number of allowances to be issued at the start of the phase and at the mid-point of the phase? (Y/N)</p> <p>b) Please expand on your answer, providing evidence in support of your response where possible.</p>
24	<p>In the absence of historical emissions data, how could the regulator make an environmentally robust assessment of the eligibility and emissions target of a new entrant for the Small Emitter Opt-Out or the Ultra-Small Emitters Exemption, without undermining the environmental integrity of the system?</p>
25	<p>a) Do you consider that we should create a fund for industrial decarbonisation under a linked or a standalone UK ETS? (Y/N)</p> <p>b) Please expand on your answer, providing evidence in support of your response where possible.</p>
26	<p>What lessons and improvements can be drawn from your experience of EU ETS funds, and other forms of financial support for industrial decarbonisation, in order to maximise the impact of any funding?</p>
27	<p>How can a fund be best designed to overcome barriers to investment in decarbonisation? Please comment on:</p> <ul style="list-style-type: none"> a) What the focus of support should be b) Length of financial support c) Level of financial support d) Type of financial support e) v) Which types of financial expenditure to focus spending on? (eg. Capex, opex)
28	<p>What issues do you anticipate in the creation of such a fund? Would other support structures deliver the objectives of a fund more effectively? Please expand on your answer.</p>
29	<p>If a fund for industrial decarbonisation is created, what are your views on the sources of allowances for the fund?</p>

30	What are your views on redirecting a proportion of free allowances for auctioning and creating the fund out of the revenue generated by those free allowances?
31	Are there further options for sources of allowances we should be considering?
32	Do you think there is potential for the use of offsets by operators to meet their compliance obligations in the UK ETS?
33	How could a UK ETS evolve over the coming years in order to ensure the system delivers for future challenges and encourages innovation within business?
CHAPTER 2: Operation of a UK ETS	
34	<p>a) Do you agree with any (or all) of the proposals for MRV simplification in a UK ETS? (Y/N)</p> <p>b) Do you agree with those proposals that would also apply to a Carbon Tax? (Y/N)</p> <p>c) Please expand on your answer, providing evidence in support of your response where possible.</p>
35	<p>a) Do you agree with these proposals for the arrangements in relation to Enforcement, Appeals and Penalties as described above? (Y/N)</p> <p>b) Please expand on your answer, providing evidence in support of your response where possible. Concerns about a change in penalties in general should be addressed through relevant questions in Chapter 4. Please reference the paragraph number (or regulation in question if this relates to a penalty change) of the change and the reasons why you believe it to be inappropriate.</p>
36	<p>a) Do you agree with the proposals that the auction success criteria in a standalone UK ETS should be changed as described above? (Y/N)</p> <p>b) Do you agree with the proposed method of redistributing unsold allowances across future auctions and a reserve? (Y/N)</p> <p>c) Please expand on your answers, providing evidence in support of your response where possible.</p>
37	<p>a) Do you agree with the proposal that banking and borrowing arrangements in a UK ETS should mirror those of Phase IV in the EU ETS as described above? (Y/N)</p> <p>b) In the case of a standalone UK ETS how can we best balance the potential ability to bank allowances with the UK's wider decarbonisation goals?</p>

	c) Please expand on your answer, providing evidence in support of your response where possible.
38	a) Do you agree with the above proposed changes to account administration relating to all accounts and Authorised Representatives? (Y/N) b) Please expand on your answer, providing evidence in support of your response where possible.
39	a) Do you agree with the above proposed changes to account administration relating only to operator and aircraft operator holding accounts? (Y/N) b) Please expand on your answer, providing evidence in support of your response where possible.
40	a) Do you agree with these proposals intended to increase the security of a Registry and prevent criminal activities? (Y/N) b) Please expand on your answer, providing evidence in support of your response where possible.
41	a) Would one or several of the options above further enhance the security of a UK Registry and the integrity of the UK carbon market? (Y/N) b) Please expand on your answer, providing evidence in support of your response where possible.
42	a) Are there further simplifications or improvements that could be made to the operation of a UK Registry? (Y/N) b) Please expand on your answer, providing evidence in support of your response where possible.
CHAPTER 3: Aviation	
43	a) Do you agree with the proposed routes (Option 3) to be covered by a UK ETS? (Y/N) b) Please expand on your answer, providing evidence in support of your response where possible.
44	a) Do you agree that the aviation component of a UK ETS cap and trajectory should be calculated to ensure that it represents a level of ambition at least as ambitious as our proportional share of the EU ETS cap? (Y/N) b) Please expand on your answer, providing evidence in support of your response where possible.

45	<p>a) Do you agree with the proposed approach to determining free allocation of allowances for the aviation sector? (Y/N)</p> <p>b) Please expand on your answer, providing evidence in support of your response where possible.</p>
46	<p>a) Do you agree with the proposal to ask aircraft operators to submit their 2010 tkm data and 2010-2014 tkm data (if benefiting from the special reserve) should it not be possible to obtain this data from the European Regulators? (Y/N)</p> <p>b) Please expand on your answer, providing evidence in support of your response where possible.</p>
47	<p>a) For a linked UK ETS, do you agree that the EU ETS thresholds should be adopted? (Y/N)</p> <p>b) Please expand on your answer, providing evidence in support of your response where possible.</p>
48	<p>a) For a standalone UK ETS, do you agree that the thresholds should be defined in relation to the routes in a UK ETS only? (Y/N)</p> <p>b) Please expand on your answer, providing evidence in support of your response where possible.</p>
49	<p>a) Do you agree that both a linked and a standalone UK ETS should mirror all other EU ETS exemption criteria? (Y/N)</p> <p>b) Please expand on your answer, providing evidence in support of your response where possible.</p>
50	<p>a) Do you agree that MRV requirements for a UK ETS should align with the EU ETS? (Y/N)</p> <p>b) Please expand on your answer, providing evidence in support of your response where possible.</p>
51	<p>a) Do you agree with the proposed phase structure for the inclusion of the aviation sector in a UK ETS? (Y/N)</p> <p>b) Please expand on your answer, providing evidence in support of your response where possible.</p>
CHAPTER 4: Continued UK Membership of the EU ETS for Phase IV	
52	<p>a) Do you think the proposed timeline and method for the legal transposition of the Phase IV Directive and tertiary legislation are reasonable? (Y/N)</p>

	b) Please expand on your answer, providing evidence in support of your response where possible.
53	<p>a) Do you agree with the proposed approach to transposition of tertiary legislation outlined in this chapter? (Y/N)</p> <p>b) Please expand on your answer, providing evidence in support of your response where possible.</p>
54	<p>a) Do you agree that the proposed penalty for non-compliance with a notification requirement is appropriate? (Y/N)</p> <p>b) Please expand on your answer, providing evidence in support of your response where possible.</p>
55	Are you responding on behalf of an installation that emits less than 25,000t CO ₂ eq annually and with a combustion threshold less than 35MW, or meets the 2012 GHG Regulations definition of a hospital installation? (Y/N)
56	Are you responding on behalf of an installation that was a member of the UK's Small Emitter and Hospital Opt-out scheme in Phase III? (Y/N)
57	<p>a) Do you agree that these measures, including the risk-based approach to audit and inspection, are appropriate for these emitters? (Y/N)</p> <p>b) Please expand on your answer, providing evidence in support of your response where possible.</p>
58	<p>a) Do you support the continuation of the UK's Article 27 Scheme for Phase IV? (Y/N)</p> <p>b) Please expand on your answer, providing evidence in support of your response where possible.</p>
59	<p>a) Do you agree with the proposed deadlines for operators to indicate to regulators their intent to enter the UK's Article 27 Scheme (30 June 2019 and 30 May 2024 notification of intent, 31 August confirmation)? (Y/N)</p> <p>b) Please expand on your answer, providing evidence in support of your response where possible.</p>
60	<p>a) Do you agree with the proposed approach to the 'banking' of overachievement against emissions targets? (Y/N)</p> <p>b) Please expand on your answer, providing evidence in support of your response where possible.</p>

61	<p>a) Do you agree with the proposal to simplify the scheme, by offering one route to calculating Article 27 emissions targets for Phase IV – i.e. through the historical emissions methodology and not NIMs? (Y/N)</p> <p>b) Please expand on your answer, providing evidence in support of your response where possible.</p>
62	<p>a) Do you agree with the proposal to simplify the scheme by reducing the discretion for regulators in relation to the 'Regulation 55' penalty (for installations exceeding their emissions target)? (Y/N)</p> <p>b) Please expand on your answer, providing evidence in support of your response where possible.</p>
63	<p>a) Are there further simplifications that could be made for Phase IV Article 27 Scheme participants, respecting the provisions established by the EU ETS Directive? (Y/N)</p> <p>b) Please expand on your answer, providing evidence in support of your response where possible.</p>
64	Do you have any further general comments on the proposed UK Phase IV Article 27 Scheme not covered by the previous questions?
65	<p>a) Do you support the proposed implementation of an Article 27a exemption scheme as a proportionate measure to simplify the scheme and reduce administrative burdens for installations with very low emissions? (Y/N)</p> <p>b) Please expand on your answer, providing evidence in support of your response where possible.</p>
66	Are you responding on behalf of an installation that emitted less than 2,500t CO ₂ eq annually in the years 2016, 2017 and 2018? (Y/N)
67	<p>a) Do you agree with the process outlined for an installation's entry into the Article 27a Scheme? (Y/N)</p> <p>b) Please expand on your answer, providing evidence in support of your response where possible.</p>
68	<p>a) Do you agree with the UK Government's and the Devolved Administrations' proposed approach to penalising operators who exceed the emissions threshold and do not report, including the timelines for notification and other administrative issues? (Y/N)</p> <p>b) Please expand on your answer, providing evidence in support of your response where possible.</p>

69	<p>a) Do you agree that operators entering the Article 27a Scheme should declare a preference for what should happen should they exceed the emissions threshold, to enable them to enter the Article 27 Scheme if necessary? (Y/N)</p> <p>b) Please expand on your answer, providing evidence in support of your response where possible.</p>
70	<p>a) Are there further simplifications that could be made for Phase IV Article 27a Scheme participants, respecting the provisions established by the EU ETS Directive? (Y/N)</p> <p>b) Please expand on your answer, providing evidence in support of your response where possible.</p>
71	<p>a) Do you agree with the proposed approach to not implement the Article 27a Scheme provision on reserve or backup generators? (Y/N)</p> <p>b) Please expand on your answer, providing evidence in support of your response where possible.</p>
72	<p>a) Assuming you are in scope, would you choose to take advantage of the proposed Article 27a Scheme for Phase IV? (Y/N/not in scope)</p> <p>b) Please expand on your answer, providing evidence in support of your response where possible.</p>
73	<p>a) Do you agree to the proposed use of penalties for implementing the Article 27a Scheme? (Y/N)</p> <p>b) Please expand on your answer, providing evidence in support of your response where possible.</p>
74	<p>Do you have any general comments on the proposed UK Phase IV Article 27a Scheme, not captured by the previous questions?</p>
75	<p>a) Do you agree with each of the proposed penalty increases outlined in Annex C? (Y/N)</p> <p>b) Please expand on your answer, providing evidence in support of your response where possible, referencing the regulation number(s) of the point(s) in question.</p>
76	<p>a) Do you agree with the proposed changes outlined in this section? (Y/N)</p> <p>b) Please expand on your answer, providing evidence in support of your response where possible, referencing the paragraph number(s) of the point(s) in question.</p>

77	<p>a) Do you think the implementation of Article 13 would be beneficial? (Y/N)</p> <p>b) If implementing this derogation, what should the UK's priorities be, and what would you like to see from such a measure? What are the possible risks that you can identify from undertaking this approach?</p>
78	<p>a) Would you be happy to work with government and regulators to further explore these options on Article 13 of the MRR in advance of Phase IV? (Y/N)</p> <p>b) Please expand on your answer, providing evidence in support of your response where possible.</p>
79	<p>Do you have any further comments or questions on the content of this consultation chapter?</p>

Chapter 1: Design of a UK Emissions Trading System

Introduction

1. An emissions trading system works on a 'cap and trade' basis. A limit is set on the total greenhouse gas emissions allowed by all participants covered by the system (the 'cap') which is reduced over time. This cap is converted into tradable emissions allowances. One allowance gives the holder the right to emit one tonne of CO₂ (or its equivalent).
2. The requirement to hold the right to emit carbon ensures that participants are accountable for the costs associated with their emissions. The ability to trade these rights via allowances creates a market for them. The resulting carbon price signifies the amount participants are willing to pay per allowance. The higher the carbon price, the more expensive it is to use higher polluting fuels and processes and the greater the incentive on participants to reduce their carbon emissions.
3. Additionally, the trading of allowances provides the flexibility to ensure emissions are reduced where it costs least to do so, whilst a strong carbon price promotes investment in clean, low-carbon technologies.
4. The following chapter sets out the proposals for the main design features of a UK Emissions Trading System (UK ETS), primarily related to stationary installations. Features of the system which relate solely to aviation are set out in Chapter 3.
5. The proposals in this chapter would be applicable for either a linked or standalone UK ETS. Where different proposals would apply under a linked or standalone system this is highlighted within the relevant sections.

Consultation Questions

- 1 a) Are you a current participant of the EU ETS? (Y/N)
b) If you are a participant or a representative of a sector, which sector do you belong to?

Does your interest in the ETS relate to the operation of the scheme in a particular geographical area?

- 2 a) England
b) Wales
c) Scotland
d) Northern Ireland
e) UK-wide

Scope

6. **We propose** that the scope of a UK ETS, in terms of gases and sectors, should align with the current scope of the EU ETS and cover emissions of CO₂, N₂O, CH₄, SF₆, hydrofluorocarbons and perfluorocarbons. It should cover greenhouse gases from electricity generators, aircraft operators and heavy industry above a certain size. For a detailed list of activities currently covered by the EU ETS, which a UK ETS will cover, including activity-specific lower bound thresholds, please see Annex B.
7. This approach will deliver continuity and help ensure our approach is at least as ambitious as that of the EU ETS. Recognising that there may be a case in future to expand the system to additional sectors, or to cover additional greenhouse gases, we propose to keep the scope of a UK ETS under review (see the Phases and Reviews section below).
8. For more information on the proposed scope with respect to aviation, see Chapter 3.

Consultation Questions

- 3 a) Do you agree with the proposed scope of a UK ETS? (Y/N)
b) Please expand on your answer and give evidence where possible.
- 4 a) Do you have any suggestions for which sectors might be included in scope in the future? (Y/N)
b) Please expand on your answer and give evidence where possible.

Cap and Trajectory

9. The overall reduction in carbon emissions driven by an ETS is determined by setting a limit on the level of available emission allowances (the cap) and the rate by which those allowances are reduced over time (the trajectory).
10. For a linked UK ETS the level of the cap would be subject to negotiation with the EU, as a cap on the UK scheme would function as part of the wider EU-linked carbon market. However, in the event that we introduce a standalone UK ETS we would need to set an effective cap.
11. **The rest of this section considers the cap in a standalone UK ETS only.**
12. In the EU ETS, the cap is set against a baseline period, with a declining trajectory, Linear Reduction Factor (LRF), determined before the start of a phase and aligned with the agreed high-level EU greenhouse gas targets, currently set out to 2030. Currently, in Phase III of the EU ETS (2013-2020), there are separate caps for stationary and aviation operators, with the aviation sector being able to use allowances from the stationary sector, but not vice versa.
13. For a standalone UK ETS **we would propose** having a single cap that includes both stationary and aircraft operators, with all allowances in the scheme being interchangeable between participating sectors. This proposal is in line with the approach which will be taken under Phase IV of the EU ETS. **We would also propose** a trajectory for reducing the total number of allowances in the system each year, bearing in mind the need for ETS participants to contribute reasonably to the UK's overall decarbonisation goals.
14. The level of the cap is one critical factor in determining overall carbon values, which we recognise is a key consideration for industrial competitiveness. The UK ETS Appraisal at Annex A considers the potential impacts to UK businesses and society of different levels of ambition in a UK ETS compared to the EU ETS.

15. In setting the cap for a UK ETS, the UK Government and the Devolved Administrations will honour the commitment set out in the Clean Growth Strategy that our future approach to carbon pricing will be at least as ambitious as the existing system and provide a smooth transition for the relevant sectors.⁸
16. It is important to note that “as ambitious” does not necessarily equate to a calculation of the UK’s notional share of the existing EU ETS cap. This is because the UK is estimated to accumulate a surplus of carbon allowances to the EU ETS, due in part to the significant progress we have made in decarbonising those sectors of the economy covered by emissions trading. As such, actual emissions from the UK traded sector are expected to be lower than our notional share of the EU ETS cap.
17. Ensuring a “smooth transition” between the EU and UK systems could mean setting a steeper trajectory to facilitate the availability of more allowances in the first year or years of the phase, and fewer in later years, so that the effects of a tighter cap materialise over the course of a phase rather than at the beginning.
18. As set out in this chapter, we are also minded to undertake an early phase review of the UK ETS in time for any changes to be applied to the second part (2026-2030) of the first phase of the scheme. The trajectory could be within scope of this review, in the light of international developments such as the first review of commitments under the Paris Agreement.
19. We also note that the UK has a Total Carbon Price (TCP) in place for electricity generation in Great Britain, ensuring cost-effective carbon emissions reductions through reducing unabated coal generation and encouraging low-carbon investments. The TCP is currently created by the combination of the EU ETS and the Carbon Price Support (CPS), and following EU Exit the TCP will be the sum of the CPS and either the linked ETS price or a domestic carbon pricing system. The CPS will remain the same for 2020-21 in line with the 2018 Budget announcement that the CPS rate will be frozen at £18/tCO₂ in 2020-21. From 2021-22 the government will seek to reduce the CPS rate if the TCP remains high.
20. In taking the final decision over the level of the cap and the trajectory for reducing the number of allowances issued each year, in both a linked and a standalone UK ETS, the UK Government and the Devolved Administrations are legally obliged under the Climate Change Act 2008 to seek and take into account the advice of the Committee on Climate Change (CCC). This advice is being sought in parallel to this consultation.

⁸ Clean Growth Strategy, p.44: <https://www.gov.uk/government/publications/clean-growth-strategy>

Consultation Questions

- 5 a) Do you agree that costs to business alongside climate ambition are the appropriate ones to be considered for the final decision on setting the cap and trajectory? (Y/N)
- b) What other factors should be prioritised in the setting of the cap and trajectory?
- c) Please expand on your answer and give evidence where possible.
- 6 What would the implications be for your business if the cap for a standalone UK ETS was set at a tighter level than UK's anticipated notional share of the EU ETS cap?

Distribution of Allowances

21. Under the EU ETS, the principal method for distributing allowances to participants is via government auctions. Participants can then trade these allowances between themselves bilaterally or most commonly through secondary markets.
22. However, a price on carbon can lead to certain industrial sectors being at a competitive disadvantage compared to their counterparts in countries without similar carbon costs. There is a risk that this disadvantage leads to businesses relocating their production, investment and associated emissions abroad. As a result, there is potential for an increase in global emissions – a concept known as carbon leakage.
23. In order to maintain the competitiveness of those sectors at significant risk of carbon leakage a portion of EU ETS allowances are allocated for free.
24. The EU ETS distributes allowances into different 'pots', with each pot performing a different role:
- a) Auction share: this provides the primary means of introducing allowances into the market via auctions, ensuring a price on emissions and reinforcing the polluter pays principle.
 - b) Free allocation share: this pot provides a number of free allowances available to maintain the competitiveness of sectors at risk of carbon leakage.
 - c) New Entrants Reserve (NER): this is a ring-fenced number of free allowances available for new entrants and expansions of existing installations to ensure investments in newer more efficient, lower carbon facilities are not disincentivised, as well as to account for significant production increases arising from changing economic conditions.

- d) Funds share: this is a ring-fenced amount of allowances earmarked for auction, which, when sold, generate revenue that is used for a number of purposes, including the support of commercialisation and adoption of low-carbon technologies.

Distribution of Allowances: UK ETS Proposals

- 25. Under any carbon pricing mechanism, we believe there is a strong case for provisions to maintain the competitiveness of those industries at significant risk of carbon leakage. A UK ETS would therefore continue to distinguish allowances between those to be auctioned and those provided for free.
- 26. **We propose** that a UK ETS would distribute allowances under the overall stationary cap to:
 - a. A free allocation share, calculated as set out below;
 - b. A NER, based on the UK's estimated share of the Phase IV NER;
 - c. An auction share based on the remaining number of allowances after distribution of allowances to other pots.
- 27. See below for further information regarding the possibility of creating a fund for industrial decarbonisation. If a fund was created there could be implications for the distribution of allowances, as detailed in that section.
- 28. Detailed descriptions of the different shares and related proposals for a UK ETS can be found in the following parts of this consultation document:
 - a. Auctioning of allowances, see Chapter 2.
 - b. Free Allocation and the New Entrants Reserve (NER), see below.
- 29. We will review the proposed split in the light of responses to this consultation and after receiving advice from the Committee on Climate Change on the overall UK ETS cap. In taking a final decision on the split we would seek to ensure an appropriate balance across the different allowance shares in a UK ETS.

Free Allocation

- 30. **We propose** that a UK ETS should provide free allowances as a means of maintaining the competitiveness of those sectors at risk of carbon leakage. Alongside this, **we propose** to continue providing a level of free allocation to those UK ETS industries not significantly exposed to carbon leakage in order to support their transition towards a low-carbon economy.

31. To ensure a smooth transition for participants, **we propose** that a UK ETS should use the EU ETS free allocation methodology (outlined in paragraph 34 onwards below) and existing data requirements to determine the number of free allowances an installation receives, together with an approach to the industry cap outlined from paragraph 48 below. Reflecting the most up-to-date Phase IV rules, a UK ETS free allocation methodology will provide similar levels of support for UK industry compared to their European counterparts.
32. **We propose** that electricity generation will not receive free allowances, in line with the approach taken in the EU ETS.
33. The Evolution of the Emissions Trading System section at the end of this chapter invites stakeholder views on innovative design features that we could consider for subsequent phases of the UK ETS. One area could be around reviewing the risk of carbon leakage in the context of developments in carbon pricing mechanisms worldwide to ensure that the system is adequately reflecting competitive pressures on sectors.

Free Allocation: UK ETS Proposals

34. Free allocation for the first phase of a UK ETS will be calculated in advance for a given five-year allocation period. In the first phase of a UK ETS that would mean two allocation periods: the start of the system-2025; and 2026-2030. In line with the EU ETS, **we propose** that the allocation methodology follows two stages – a preliminary free allocation, and then consideration of whether a Cross-Sectoral Correction Factor applies – to determine the final number of allowances allocated for free.
35. For each allocation period of a UK ETS, preliminary free allocation will be governed by the following calculation:

$$\text{Preliminary Free Allocation} = \text{Historical Activity Level} \times \text{Benchmark} \times \text{Carbon Leakage Exposure Factor}$$

36. Necessary data to support this calculation is currently being collected as part of the EU ETS Phase IV 2019 National Implementation Measures (NIMs) exercise that the UK is participating in. A UK ETS would undertake another data collection exercise for the second allocation period (2026 – 2030), as in Phase IV of the EU ETS.

37. For the purposes of data collection, each operator is required to divide each installation eligible for free allocation into sub-installations. Described by system boundaries that encompass inputs, outputs and emissions, sub-installations are designed to make the many different circumstances of installations comparable within one single benchmark. The collected data for these sub-installations must cover a defined baseline period.⁹
38. Under the preliminary free allocation calculation, eligible participants will see a fixed amount of free allowances they might receive spread equally for each year in the given allocation period.

Historical Activity Level (HAL)

39. The Historical Activity Level (HAL) indicates the historical production of a given sub-installation per year over the baseline period. A UK ETS will calculate an installation's HAL on the basis of the NIMs data collection exercise. This would be updated for the second allocation period.

Benchmarks

40. A benchmark is a reference value for greenhouse gas emissions relative to production activity. There are 52 product benchmarks, each representing the average of the top 10% most efficient installations for a given product across Europe. Where use of a product benchmark is not possible, two fall-back benchmarks based on heat production and fuel consumption, or a process emissions factor, are used.
41. **We propose** that a UK ETS would use the EU ETS Phase IV benchmark values in its free allocation methodology. These will become publicly available from the European Commission in mid-2020.
42. The EU ETS Phase IV benchmark values a UK ETS would use would be updated for each allocation period, reflecting the associated product or process' efficiency improvement over time. These are calculated based on the difference between the Phase III and Phase IV benchmark values, subject to a minimum of 0.2% and a maximum of 1.6%.
43. Using the latest European-wide information collected for Phase IV means we can be confident the benchmarks for a UK ETS will be based on sufficiently broad sets of data, maintain best available real-world levels of efficiency standards and support fair and open competition across European industries.

⁹ The HAL baseline period is 2014 – 2018 for the first allocation period and 2019 – 2023 for the second. The benchmark baseline period is 2016 – 2017 for the first allocation period and 2021 – 2022 for the second.

44. Including UK installation data in the updated Phase IV benchmark values is in the interest of both UK and EU ETS industry. Should the European Commission not include data from UK installations collected during the 2019 NIMs exercise in their calculation of benchmark values, we may consider using such UK data in an update of EU ETS benchmarks for the purposes of a UK ETS.

Carbon Leakage Exposure Factor

45. The vast majority of UK ETS free allocation will only be provided to those sectors deemed at risk of carbon leakage. **We propose** that a UK ETS would use the EU ETS Phase IV Carbon Leakage List (CLL). This will ensure a similar level of support across European industries. The EU ETS CLL defines the sectors at greatest risk of carbon leakage based on an assessment of their emissions intensity and trade intensity.¹⁰
46. Under our proposed approach, those UK ETS industry sectors at greatest risk of carbon leakage, as defined by the EU ETS Phase IV CLL, would receive a provisional allocation of 100% of their benchmarked free allocation as part of the preliminary free allocation stage (a Carbon Leakage Exposure Factor (CLEF) of 1) in order to maintain their competitiveness.
47. Those industry sectors not on the CLL would receive a provisional allocation of 30% of their benchmarked free allocation as part of the preliminary free allocation stage (a CLEF of 0.3) for the first allocation period. Provision of some free allowances to UK ETS sectors not exposed to carbon leakage supports their transition towards a low-carbon economy. As in Phase IV of the EU ETS, the number of free allowances given to these sectors would decrease linearly over the second allocation period to be 0% in 2030. District heating installations would be exempt from this reduction.

Industry cap and Cross-Sectoral Correction Factor (CSCF)

48. The EU ETS includes a cap on the total number of allowances that can be freely allocated – an ‘industry cap’. **We propose** that in a UK ETS, the second stage of the free allocation calculation would also involve such an ‘industry cap’ to determine the final free allocation an installation would receive. Limiting preliminary free allocation via an industry cap preserves both the integrity of the overall ETS cap and the auction share of allowances.
49. A UK ETS industry cap would be calculated for the first year of the phase to reflect the UK’s ‘share’ of the Phase IV industry cap for that year, and then reduce annually in proportion to the declining trajectory of the overall UK ETS cap. This reflects the fact that an increasing level of emission reduction effort is expected from industrial installations.

¹⁰ A sector is deemed to be at risk of carbon leakage if its carbon leakage indicator (trade intensity x carbon intensity) exceeds a 0.2 threshold. A quantitative assessment with specified criteria or a qualitative assessment at a disaggregated level applies for a limited number of cases.

50. As stated above, we will review the proposed industry cap as part of the split of allowances across the different pots in the light of responses to this consultation and after receiving advice from the Committee on Climate Change on the overall UK ETS cap. In taking a final decision on the split, we would seek to ensure an appropriate balance across the different pots in a UK ETS.
51. A UK ETS would also require a means to enable the potential reduction in preliminary free allocation for years when the sum of UK installation preliminary free allocation exceeds the industry cap. **We propose** to continue to achieve this through the uniform application of a Cross-Sectoral Correction Factor (CSCF) if required, as used in the EU ETS. A CSCF would uniformly reduce any preliminary free allocation above the industry cap across all operators.
52. The final number of annual free allowances received by an installation would therefore be determined based on an adjusted calculation:

$$\text{Final Free Allocation} = \text{Preliminary Free Allocation} \times \text{Cross-Sectoral Correction Factor}$$

Measures to mitigate the risk of a Cross-Sectoral Correction Factor (CSCF)

53. We recognise the industry concern with the use of a CSCF under Phase III of the EU ETS. In using the Phase IV approach to free allocation, a UK ETS would include the measures to be introduced to provide enhanced flexibility to mitigate the risk of triggering a CSCF and its severity if required.
54. For a year in which the sum of UK preliminary free allocation does not exceed the industry cap, the difference would be used to offset any future year that the industry cap is breached and a CSCF would otherwise be triggered.
55. Where the CSCF would still be triggered, up to 3% of allowances from the stationary portion of the cap, originally earmarked for auction, would be made available to further offset its impact. Any remaining preliminary free allocation above the industry cap after these steps are taken would then be removed by the CSCF.
56. During negotiations on the development of Phase IV rules, the UK proposed the introduction of multiple tiers for the Carbon Leakage Exposure Factor (CLEF) rather than the existing binary approach to identifying which sectors are at risk of carbon leakage. The proposal was intended to better target free allocation at those sectors at greatest risk of carbon leakage and avoid the risk of the CSCF being applied.

57. Whilst this proposal was not implemented, the 3% flexible auction share was introduced to mitigate the risk and severity of the CSCF. To avoid negative implications for maintaining a similar level of support across EU and UK industry we do not propose to introduce additional carbon leakage tiers for the launch of a UK ETS. However, we may seek to revisit additional carbon leakage tiers as part of the future evolution of the system beyond 2030.

New Entrants Reserve (NER)

58. A UK ETS will include a reserve of free allowances set aside for installations who become eligible for participation in-phase – the New Entrants Reserve (NER). The NER provides a source of allowances to ensure new entrants are not placed at a competitive disadvantage. They also ensure investments in newer more efficient, lower carbon installations are not disincentivised. Allowances to stock an NER would be set aside from under the cap at the start of a UK ETS phase.
59. The specific number of free allowances a UK ETS new entrant would receive upon application would be calculated using the same calculation as used for incumbents. For the purposes of this calculation, a new entrant's HAL would be based on the first full calendar year of normal operation.

In-phase allocation adjustments from production changes

60. To account for economic growth within phases, free allowances from the NER would also be made available to installations who significantly increase their production. Conversely, where an installation's production decreases significantly or they cease operations, allowances would be transferred back to the NER.
61. **We propose** that a UK ETS would use the EU ETS Phase IV thresholds for these production changes, with adjustments for both increases and decreases in production assessed against a 15% threshold based on a rolling average of two years.
62. Further implementation requirements for free allocation adjustments due to production changes in the EU ETS are yet to be determined by the European Commission. Scheduled to be published in 2019, these include provisions regarding the annual monitoring and accredited verification of production data alongside the potential use of absolute thresholds. The UK has been involved in the discussions on these proposals to ensure they do not significantly increase the administrative burden on installations. We will review the published requirements, with the intention that a UK ETS will implement these additional provisions.

Consultation Questions

- 7
 - a) Do you agree with using the EU ETS Phase IV Carbon Leakage List and Benchmarks for determining UK ETS free allocation? (Y/N)
 - b) Please expand on your answer and give evidence where possible.
- 8
 - a) Do you agree with using the Phase IV approach to the Carbon Leakage Exposure Factor for a UK ETS? (Y/N)
 - b) Please expand on your answer and give evidence where possible.
- 9
 - a) Do you agree with the process and measures to mitigate the risk of a Cross-Sectoral Correction Factor being applied? (Y/N)
 - b) Please expand on your answer and give evidence where possible.
- 10
 - a) Do you agree with the operation of the UK ETS New Entrants Reserve, including for production increases and decreases? (Y/N).
 - b) Please expand on your answer and give evidence where possible.
- 11
 - a) Do you have any further comments regarding our approach to free allocation? (Y/N)
 - b) Please expand on your answer and give evidence where possible.

Market Stability

63. This section sets out two mechanisms concerning market stability. The first – a Supply Adjustment Mechanism (SAM) – is designed to provide price stability on an annual basis via the dynamic adjustment of supply within the cap. The second – a Cost Containment Mechanism (CCM) – is designed to provide a safeguard against significant in-year price spikes.
64. In a linked system the potential use and governance of these mechanisms would likely need to be coordinated with that of the respective EU ETS mechanisms – the EU ETS Market Stability Reserve (MSR) and the CCM.

Supply Adjustment Mechanism (SAM)

65. The supply of allowances in a basic ETS is fixed under the cap for the duration of the Phase. Demand for allowances is of course variable and depends on numerous factors including economic conditions, complementary policy,¹¹ and technological development. If the available supply of allowances at auction is not flexible to these changes in demand

¹¹ Other policies which also reduce emissions.

(whilst not breaching the cap), surpluses or shortages could arise with consequences for the price of allowances.

66. The benefits of a SAM for a UK ETS are that it will strengthen the low-carbon investment signal when there is an excess of allowances in the system and reduce cost to participants when allowances are in short supply. The result is a more stable price that provides participants with greater clarity to inform their operational and investment decisions.
67. The EU ETS has a SAM in the form of the Market Stability Reserve (MSR) which became operational in January 2019. It was introduced in light of the recent recession in the EU¹² which contributed towards a 2.1 billion surplus of allowances and a fall in carbon price of over 50% when compared to Phase II (2008 to 2012).¹³ Allowances are added to, or released from, the reserve at an annual point if the volume of allowances in circulation¹⁴ passes defined trigger thresholds. When the volume of allowances in circulation falls below 400 million, allowances are released from the reserve and are made available for auctioning. When above 833 million, allowances are withheld from auctions and placed into the reserve.
68. **We propose** to develop a SAM for a standalone UK ETS broadly based on the EU ETS MSR. However, adaptations would be required in order to make the SAM operational in a UK context. For example, bespoke volume thresholds for triggering the withdrawal or release of allowances would be required due to the reduction in market size. In a standalone UK ETS, a SAM based on the EU ETS MSR could not be operational immediately due to the SAM making adjustments based on the total number of allowances in circulation at the end of the previous year. Therefore, we will consult separately at a later date on the finer policy detail and implementation timing of a SAM in a standalone UK ETS.

Consultation Questions

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|----|--|
| 12 | a) Do you agree with the concept of introducing a SAM, similar in function to the EU ETS MSR, for a UK ETS? Noting that in a standalone system, a SAM could not be operational immediately and we will consult on the specific details at a later date. (Y/N)
b) Please expand on your answer and give evidence where possible. |
| 13 | What factors should be considered when setting the thresholds for a standalone UK ETS SAM? |
| 14 | What factors should be considered in determining at what point in Phase I of a standalone UK ETS a SAM should be introduced? |

¹² Information on the Market Stability Reserve can be found here: https://ec.europa.eu/clima/policies/ets/reform_en

¹³ Page 29, Report on the functioning of the European carbon market: https://ec.europa.eu/clima/news/carbon-market-report-surplus-eu-ets-allowances-continues-shrink_en

¹⁴ The European Commission conducts a total number of allowances in circulation (TNAC) assessment on an annual basis.

Cost Containment Mechanism (CCM)

69. In addition to the annual supply/demand flexibility afforded by a SAM, it will be important for a UK ETS to have the ability to respond to any significant short-term price spikes that occur within a year through a CCM.
70. Whilst historically EU ETS prices have been considered to suffer from being too low, the EU ETS includes provisions to address persistently high price spikes. The CCM is triggered if the allowance price is more than three times the average EU ETS price of allowances during the two preceding years for more than six consecutive months. To date, it has not been activated given the significant surplus of allowances that has depressed prices for much of Phase III.
71. In the EU ETS, the CCM is triggered if the price evolution does not correspond to changing market fundamentals. In this situation the following decisions can be taken: 1) to bring forward allowances from future auctions, 2) to auction up to 25% of remaining allowances in the New Entrants Reserve (NER), or 3) allowances could be taken from a SAM reserve and put up for auction.
72. **We propose** that a CCM within a UK ETS mirrors the design features of the EU ETS mechanism as this may best facilitate a linking agreement and provide continuity for industry. If prices in a UK ETS exceed three times the average UK ETS price over the previous two years for more than six consecutive months, Government intervention can be considered.
73. In order to ensure functionality of a CCM in a standalone UK ETS from day one, **we propose** that the reference price for triggering a CCM in the first two years should be informed by the EU ETS price until the end of 2020, and the UK ETS price from 2021.

Consultation Questions

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| 15 | <ol style="list-style-type: none">a) Do you agree that the proposed CCM strikes the appropriate balance between effectively addressing in-year price spikes without responding too frequently to shorter term upward price fluctuations – thereby avoiding market disruption? (Y/N)b) Please expand on your answer and give evidence where possible. |
|----|---|

Transitional Auction Reserve Price

74. **We propose** an Auction Reserve Price (ARP) to mitigate any start up issues with a standalone UK ETS. The UK traded sector already has well-developed regulatory and trading capabilities and experience in dealing with the market and compliance infrastructure. Covered sectors have also been exposed to a carbon price signal under the EU ETS since 2005. The UK therefore faces very different challenges to other ‘new’ systems. Instead of gradually exposing covered sectors to a price signal, the UK needs to maintain a carbon price signal during a transitional period.
75. To provide this minimum price continuity during a transitional period before any longer-term SAM is established, we propose to include an ARP in a standalone UK ETS. The reserve price would set a minimum price for which allowances can be sold at auction (for details on how this ARP would work in the auction process, see the Auctioning and Market Rules section in Chapter 2).
76. This minimum price continuity will enable the market to continue to function smoothly during the transition from the EU ETS to a standalone UK ETS. In determining where the ARP should be set, we will consider historical EU ETS prices. The price of allowances in the EU ETS has historically remained low for a number of reasons. Overlapping policies, the availability of offsets, and the 2008 economic crisis all contributed towards reduced demand for allowances and a downward pressure on price, resulting in a 2013-14 average price of £4.70 for an EU ETS allowance.
77. More recently, EU ETS prices have been rising in part due to the anticipated impact of the MSR becoming operational and removing allowances from 2019, with an average 2018 price of £13.70. In setting the ARP for a standalone UK ETS we will take this range into consideration, in addition to more recent price trends.
78. In a linked UK ETS, we will not need an ARP because we are linking with an existing market where allowances already have a market defined value.

Consultation Questions

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| 16 | <ol style="list-style-type: none">a) Should a standalone UK ETS implement a Transitional Auction Reserve Price to smooth the market operation? (Y/N)b) Please expand on your answer and give evidence where possible. |
|----|--|

Phases and Reviews

79. Emissions trading systems typically operate through a series of phases of several years' duration, with the main parameters of the system fixed during each phase. Phases are important because although, in principle, operational changes can be made at any time (for example, the introduction of the MSR in Phase III of the EU ETS) they provide a timeframe in which the overall framework stays broadly the same. More fundamental changes are usually made for the beginning of a new phase. In this way phases balance the need for market certainty whilst allowing the system to evolve over time.
80. The EU ETS began with a shorter initial phase (2005-2007), then gradually increased its phase length for the second and third phases (2008-12 and 2013-20). The purpose of the shorter initial phase was to allow operators to develop their compliance and trading capabilities, ensure the necessary market infrastructure and services were in place and to progressively introduce a carbon price signal as well as allow policymakers to respond to any unforeseen regulatory issues.
81. The EU ETS is about to enter Phase IV (2021-2030), which will be 10 years long and can be considered a mature trading ecosystem. Phase IV will include targeted reviews of specific design features periodically within the phase (such as the MSR review in 2021 and a stocktake review in 2023 in the context of the Paris Agreement – both of which are due to reoccur every five years).
82. We have considered two broad approaches to the initial phase for a standalone UK ETS. One option was a 10 year first phase aligned to Phase IV of the EU ETS. The other option was for a shorter initial phase to give a period for participants to adapt to the new system and then have a fundamental review based on lessons learned from its first years of operation to determine the rules for the next phase.
83. **We propose** implementing an initial first phase running from January 2021 to December 2030. UK industry already has experience of a carbon market from participation in the EU ETS and for this reason we believe that a shorter initial phase is unnecessary. Starting a standalone UK ETS with a 10 year phase provides greater certainty for participants by clarity over the ETS rules for a longer period of time.
84. **Within-Phase reviews:** It is, however, also important that we have scope to keep the rules of a standalone UK ETS under review, particularly for initial years, to ensure that the system is operating as intended. We intend to do so in a way that is predictable for participants.

85. **We therefore propose** to carry out three reviews during the first Phase:
- a. **2023** – an initial review of the UK ETS conducted from 2023 onwards to assess performance during the initial years, and assess ambition in context of any available information from the first Global Stocktake within the Paris Agreement. Any necessary changes to design features will be implemented by 2026;
 - b. **Mid-Phase (2024-2027)** – a review of system performance across the first Phase. Any update to the UK ETS rules will be implemented for 2031 (Phase II); and
 - c. **2028** – a review to assess ambition in the context of any available information from the second Global Stocktake within the Paris Agreement, thereby complementing the mid-phase review – helping to refine system changes for 2031.
86. The EU ETS also has various review points during Phase IV. If we negotiate a linked UK ETS, we may need to reconsider the review points to ensure they work effectively with those planned for the EU ETS.

Consultation Questions

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| 17 | <ul style="list-style-type: none"> a) Do you agree with the proposed approach to phases? (Y/N) b) Please expand on your answer and give evidence where possible. |
| 18 | <ul style="list-style-type: none"> a) Do you agree with the proposed approach to reviews? (Y/N) b) Please expand on your answer and give evidence where possible. |

Small and Ultra-Small Emitters: Reducing the Regulatory Burden

Small Emitter and Hospitals Opt-Out Scheme

87. In a UK ETS **we propose** to implement a Small Emitter and Hospitals Opt-Out Scheme which reflects the design of the Article 27¹⁵ scheme that the UK proposes to implement for Phase IV of the EU ETS (see Chapter 4 for details of these proposals). As the fixed costs of compliance associated with a traded mechanism are spread across fewer emissions, small emitters face a disproportionate cost to comply with an ETS whilst not being sufficiently active in the market to realise the benefits of a tradable mechanism.

¹⁵ When referring to the Article 27 and 27a schemes we are referring to the Schemes in the ETS Directive <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32018L0410&from=EN>

88. An opt-out for eligible operators will enable those operators with a smaller volume of emissions to reduce their administrative burden while ensuring that the overall system remains at least as ambitious as the EU ETS. **We propose** to maintain the Phase IV proposals that installations emitting less than 25,000t CO₂eq per annum and having a net-rated thermal input below 35MW would be eligible, as well as hospitals.
89. Not counting those eligible for the Ultra-Small Emitters Exemption (see below), 279 installations emitting 2% of emissions from stationary installations within a UK ETS would be eligible to opt-out of a UK ETS and into a simplified alternative scheme of equivalent ambition which is better suited to smaller emitters.
90. Whilst the UK has supported expanding the opt-out to include more emitters previously, this was in the context of the EU ETS as a whole. A UK ETS opt-out with the proposed thresholds will best ensure that UK operators and their EU counterparts participate in an environment of fair and open competition and best facilitate a link to the EU ETS. It will also ensure that a UK ETS has a broader number of trading participants and that there is a smooth transition for business with clarity on eligibility requirements in all scenarios.

Consultation Question

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|----|---|
| 19 | <ol style="list-style-type: none">a) Do you support the implementation of a Small Emitter and Hospitals Opt-Out Scheme in a UK ETS for installations emitting less than 25,000t CO₂eq p.a. and having a thermal input less than 35MW with the same design as the Article 27 Scheme proposed by the UK under the EU ETS for Phase IV? (Y/N)b) Please expand on your answer and give evidence where possible. |
| 20 | <ol style="list-style-type: none">a) Do you have any other comments on our proposals for a Small Emitter and Hospitals Opt-Out Scheme in a UK ETS, not covered by your responses to questions in Chapter 4? (Y/N)b) Please expand on your answer and give evidence where possible. |

Ultra-Small Emitter Exemption

91. **We also propose** to allow installations emitting less than 2,500t CO₂eq per annum to be exempt from a UK ETS, reflecting the design under the Article 27a Scheme the UK proposes to implement for Phase IV of the EU ETS (see Chapter 4 for details of these proposals).
92. Ultra-small emitters face the most disproportionate compliance costs per tCO₂. In total, 168 installations emitting less than 0.1% of UK ETS emissions from stationary installations would be eligible for this exemption.

Consultation Question

- 21 a) Do you support an Ultra-Small Emitter Exemption for installations emitting less than 2,500t CO₂eq per annum? (Y/N)
b) Please expand on your answer and give evidence where possible.
- 22 a) Do you have any other comments on our proposals for an Ultra-Small Emitters Exemption in a UK ETS? (Y/N)
b) Please expand on your answer and give evidence where possible.

Entry and Exit of the Small Emitter and Ultra-Small Emitter Schemes in a UK ETS

93. **We propose** that eligible installations should be able to opt-out of, or be exempted from, the main UK ETS at two points in the first phase of the system: on 1 January 2021 and 1 January 2026, to align with the allocation periods for free allocation. The system-wide quantity of allowances for the allocation periods could be adjusted to reflect installations choosing to opt-out or be exempt by subtracting their average annual verified emissions in the periods from 2016-2018 and 2021-2023 respectively, adjusted by the trajectory of a UK ETS cap. This mirrors the approach in the EU ETS.
94. We see an opportunity to reduce administrative burden on industry by removing the qualification period for new entrants applying for the Small Emitter or Ultra-Small Emitter schemes. In the EU ETS it is not possible for a new entrant without the required 3 years of historical emissions data to enter immediately into the Small Emitter Opt-Out or Ultra-Small Emitter Exemption schemes. Instead, such installations must enter the main trading system, even if operators may have a high degree of certainty that their emissions and thermal capacity will be less than the eligibility threshold of the relevant scheme.
95. We would welcome stakeholder views on a potential method whereby adequate certainty over likely emissions and targets for a new installation could be determined, to allow them to enter the relevant scheme immediately without undermining the environmental integrity of the system.

Consultation Question

- 23 a) Do you agree with the proposed mechanism for recalculating the system-wide number of allowances to be issued at the start of the phase and at the mid-point of the phase? (Y/N)
b) Please expand on your answer and give evidence where possible.
- 24 In the absence of historical emissions data, how could the regulator make an environmentally robust assessment of the eligibility and emissions target of a new entrant for the Small Emitter Opt-Out or the Ultra-Small Emitter Exemption, without undermining the environmental integrity of the system?

Potential Fund for Industrial Decarbonisation

96. The UK Government and Devolved Administrations are committed to supporting the decarbonisation of industry to help protect the climate and the environment while achieving clean growth, increasing our productivity, creating good jobs and boosting earning power for people across the country.
97. Achieving the decarbonisation of industry is critical if we are to meet our legal carbon emissions reductions commitments under the Climate Change Act 2008 and the Paris Agreement. Industry accounts for a quarter of UK emissions, and without commercialisation and roll-out of key industrial decarbonisation technologies (such as fuel switching), meeting our targets will be more challenging.
98. This is why in the Clean Growth Strategy the UK Government committed to develop a framework to support the decarbonisation of heavy industry over the course of the Parliament. Since then the UK Government has announced a new Mission, as part of our Industrial Strategy, to have the world's first zero-carbon industrial cluster here in the UK. This will drive demand for low-carbon products and technologies, position UK clusters as top areas for global inward investment and will be supported initially by up to £170 million funding from the Industrial Strategy Challenge Fund.
99. In Budget 2018 the UK Government also announced a new Industrial Energy Transformation Fund to support businesses with high energy use to transition to a low-carbon future and to cut their bills through increased energy efficiency with up to £315 million funding over the five years to 2024.
100. Under the current EU ETS structure, there are funding streams to support the decarbonisation of industry. For example, the EU ETS introduced the "NER 300" in Phase III, which focused on the demonstration of carbon capture and storage (CCS) and innovative renewable energy technologies on a commercial scale within the EU.

101. Phase IV will build on experience by establishing the Innovation Fund for innovative low-carbon demonstration projects (from a wider variety of sectors than the NER 300, including energy intensive industries). The fund aims to bridge the funding gap of innovative and viable projects at deployment and scale-up stage which lack secure funding streams due to a variety of economic and technological barriers to private action.
102. **For either a linked or a standalone UK ETS, there is an option of replicating a similar fund structure, tied to the UK ETS, that targets the decarbonisation of UK industry.**

Consultation Questions

- 25 a) Do you consider that we should create a fund for industrial decarbonisation under a linked or standalone UK ETS?
b) Please expand on your answer and give evidence where possible.
- 26 What lessons and improvements can be drawn from your experience of EU ETS funds, and other forms of financial support for industrial decarbonisation, in order to maximise impact of any funding?
- 27 How can a fund be best designed to overcome barriers to investment in decarbonisation? Please comment on:
i) What the focus of support should be
ii) Length of financial support
iii) Level of financial support
iv) Type of financial support
v) Which types of financial expenditure to focus spending on? (eg. Capex, opex)
- 28 What issues do you anticipate in the creation of such a fund? Would other support structures deliver the objectives of a fund more effectively? Please expand on your answer.

103. If a fund for industrial decarbonisation tied to either a linked or a standalone UK ETS is created, this could have implications for the allocation split of allowances, depending on where the allowances to create revenue for the fund are to be sourced from.
104. Options include:
- a. sourcing the allowances from the auction pot;
 - b. sourcing from allowances to be freely allocated; or
 - c. a combination of these.

105. Alternatively, the UK Government may decide not to tie the revenues raised from the UK ETS directly to an industrial decarbonisation fund.
106. In the case of option a), this would only affect where the revenues from auctioning are directed, so this will have no implications for allowances freely allocated to participants.
107. In the case of option b), and partially in the case of option c), instead of being allocated to participants as free allowances and/or to the New Entrants' Reserve, those allowances would be auctioned and the revenue generated allocated to an industrial decarbonisation fund. If this option were chosen, the number of free allowances available for distribution to industry may reduce.

Consultation Questions

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|----|---|
| 29 | If a fund for industrial decarbonisation is created, what are your views on the sources of allowances for the fund? |
| 30 | What are your views on re-directing a proportion of free allowances for auctioning and creating the fund out of the revenue generated by those free allowances? |
| 31 | Are there further options for sources of allowances we should be considering? |

Evolution of the Emissions Trading System

108. The UK is a leader in climate policy and ambition, most notably being the first country to set a legally binding greenhouse gas long-term target in the landmark Climate Change Act in 2008. We have also been a global pioneer in the development of emissions trading, previously establishing a UK ETS over fifteen years ago which ran from 2002 until 2006 as the world's first economy-wide ETS and was a forerunner to the EU ETS.
109. To ensure that the UK can continue its leadership in climate policy and meet these challenges, we would welcome input from stakeholders on innovative UK ETS design features that the UK should be considering in the coming years to future-proof UK climate policy.
110. For example, the scope of a UK ETS could be increased by including additional sectors, greenhouse gases, or both. Increasing scope in these ways could help ensure the long-term viability of the market on which the system relies even as some sectors, such as power, undergo significant decarbonisation. Extending the scope of emissions trading could also increase the size of the market and help to ensure more cost-effective emissions reduction.

111. We also recognise that finding a way to harness the potential of negative emissions, carbon capture and energy efficiency technologies alongside an effective carbon price will help the UK economy and industry decarbonise. We therefore welcome views on how the design of a UK ETS can keep pace with technological innovation.
112. While not currently envisioned, there could also be ways in which an ETS could become more connected to international markets in the future. This could include options to innovatively use an ETS to help meet the UK's emissions reduction obligations or link to other emissions trading systems around the world in order to maximise the efficiency of international decarbonisation efforts.
113. According to the World Bank, 13% of global greenhouse gas emissions are already captured by emissions trading systems and many other jurisdictions are considering or in the process of implementing emissions trading systems.¹⁶ As well as increasing the efficiency of the system due to the benefit of a larger carbon market, a link between a UK ETS and another ETS would facilitate a shared vision for ambitious climate action.
114. We therefore welcome further views on how a UK ETS could be used within the framework of international climate agreements and carbon market mechanisms, such as Article 6 of the Paris Agreement.
115. Another possibility for adapting a domestic carbon pricing system could be the inclusion, for operators, of international offsets or domestic offsets such as UK woodland carbon units (WCUs) – including their usage in a standalone UK ETS. Such a change could allow operators to comply with the UK ETS by paying to reduce emissions or sequester carbon elsewhere. Implementing such a change would require stringent eligibility criteria and sufficient assurances of the quality of offsets and their impact on the environmental integrity of a UK ETS, including on the robustness of a UK ETS cap. Any such change would form part of a future review and would be subject to advice from the Committee on Climate Change as required in legislation
116. As the UK exits the EU, there is a unique opportunity to implement a carbon pricing mechanism which is as future-proof as possible and that works well for the UK economy. This consultation therefore welcomes input from stakeholders to make the most of this opportunity.

Consultation Question

32

Do you think there is potential for the use of offsets by operators to meet their compliance obligations in the UK ETS?

¹⁶ https://carbonpricingdashboard.worldbank.org/map_data

33	How could a UK ETS evolve over the coming years in order to ensure the system delivers for future challenges and encourages innovation within business?
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Chapter 2: Operation of a UK ETS

Summary

- 117. An emissions trading system (ETS) relies on several different mechanisms to aid smooth and robust operation. This chapter sets out the main processes involved. The following proposals are for both a linked and unlinked ETS, and key considerations or proposals which are different for each scenario, as well as those that would apply to a carbon tax, are highlighted accordingly.
- 118. We have identified opportunities for reducing the administrative burden on operators through the Monitoring, Reporting and Verification (MRV) process and the usage of a UK Registry. These include proposals to enable all participants to aggregate small source streams and to simplify monitoring and reporting plans.
- 119. In a UK ETS, we propose to apply an Auction Reserve Price (see Chapter 1) and change auction success criteria to steady the flow of allowances into the general system.
- 120. Overall governance for the system is included here for information. We propose that the framework currently in place for the EU ETS would broadly be replicated with UK bodies fulfilling functions in a UK ETS.
- 121. The enforcement of the rules (including penalties and the appeals process) are outlined, as are rules on 'banking' and 'borrowing' over compliance years.

Monitoring, Reporting and Verification (MRV)

- 122. UK participants in the EU ETS are currently subject to a system of Monitoring, Reporting and Verification (MRV) of their emissions, underpinning their compliance and the environmental integrity of the system. These rules are contained in the EU Monitoring and Reporting Regulation (EU MRR) and EU Accreditation and Verification Regulation (EU AVR).¹⁷
- 123. This section **proposes a number of improvements to the MRV regime to reduce burdens on business** whilst retaining the robustness and integrity of the UK ETS. These include aggregating small sources, reducing the frequency of verification visits and the simplification of monitoring plans. These improvements would be subject to negotiation in a linking scenario. This MRV process is illustrated in Figure 1 below.

¹⁷ The EU Commission amended the EU MRR and EU AVR as part of the system review for Phase IV. The amended (new) EU MRVA Regulation entered into force on 1 Jan 2019. The new EU AVR will apply for the remainder of Phase III. We will seek to replicate the new EU MRVA Regulation (and process) for Phase IV in a UK ETS as far as possible.

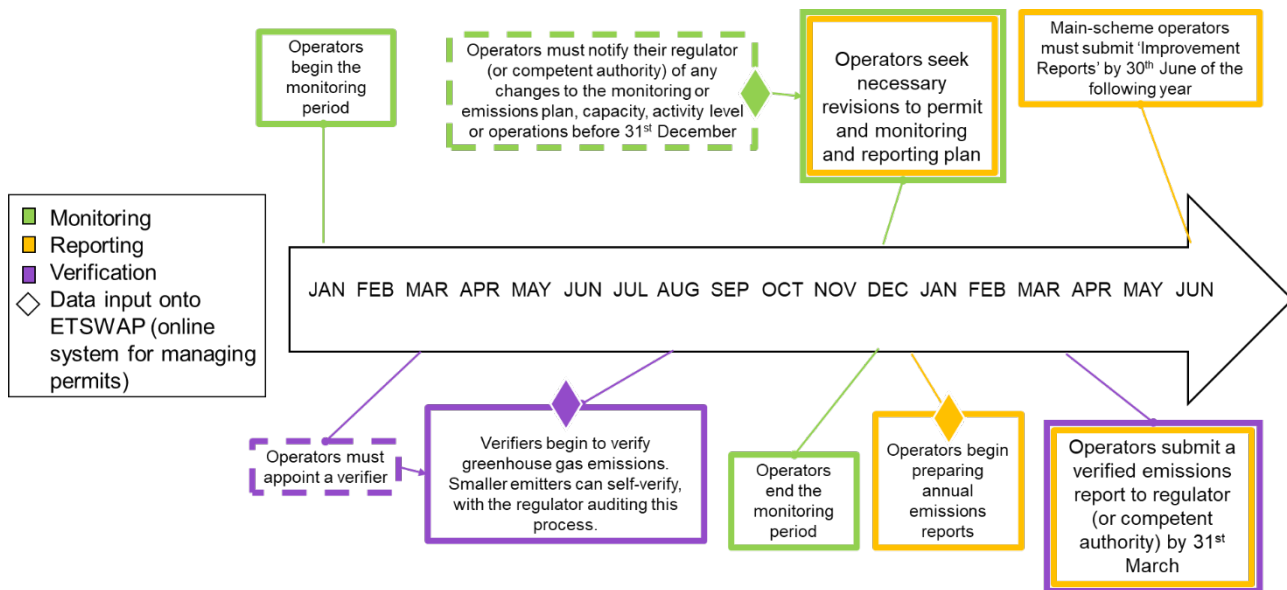


Figure 1 MRV Process Overview

124. We propose to adopt the EU ETS Phase IV reforms (see Chapter 4) to the MRV framework where feasible. Additional potential areas for improvement have been identified for implementation in a UK ETS, and these are set out below. Further opportunities for MRV improvements will be considered as part of planned system reviews.

Aggregate reporting of smaller, and infrequently used, source streams

125. For EU ETS Phase III (2013-20), simplified monitoring¹⁸ is applied to source streams classed as 'minor' and 'de-minimis.' These are source streams that jointly amount to less than 5,000t and 1,000t CO₂eq, respectively. Excluded installations in the Small Emitter and Hospitals Opt-Out Scheme are not required to carry out full monitoring of emissions from small source streams cumulatively not exceeding 1,000t CO₂eq annually; this is referred to as the de minimis rule.¹⁹ **We propose to maintain this approach in a UK ETS or under a carbon tax.**

¹⁸ The monitoring methodology used to calculate emissions from smaller source streams can have a higher degree of uncertainty. Uncertainty levels are separated into 'tiers' and are defined in Annex II of the EU MRR

¹⁹ Though some main scheme participants also have de-minimis sources which do not need to meet tier requirements. See EU MRR Art 19(3)(a)(b), Art 26(3) and Annex I(2)(b) of the EU ETS Directive.

126. To make simplified reporting proportionate for all operators, **we propose** that main scheme operators should be able to aggregate extremely small source streams on a single line in their monitoring plan and report them as one estimated figure in their annual verified emissions report.²⁰ To protect system robustness, we propose to set the threshold for aggregate reporting to source streams which jointly amount to 10t CO₂eq per annum or less. Based on analysis of 2017 emissions data, this process of aggregating smaller source streams below the proposed threshold could be used by just over half of all UK emitters and would represent a maximum of 0.001% of total emissions under a UK ETS. This would reduce administrative burdens while maintaining the environmental integrity of the scheme.

Reduced frequency of site visits by verifiers to offshore installations

127. Third-party verification ensures transparency within MRV and keeps the process robust. For EU ETS Phase III compliance, site visits by verifiers are less frequent if they are in remote locations or present low levels of risk.²¹ In the UK, offshore sites are visited every three years by the verifier (at a minimum). In light of the Phase IV revision, the verifier may decide to simplify verification to minimise the burden on participants, subject to the approval by a competent authority.²²
128. **We propose** that, under a UK ETS, this derogation is extended such that verifiers will only be required to conduct on-site visits to offshore installations (and remote locations) at regular intervals and at a minimum of twice per phase (subject to the verifier's risk assessment). Existing reduced verification requirements for smaller emitters (both on and offshore) who 'opt-out' will also be retained. **These proposals would also apply to a carbon tax.**

Reduced frequency of improvement reporting

129. For EU ETS Phase III, operators regularly assess whether applied monitoring methodologies can be improved.²³ For Phase IV, it is proposed that if improvement measures not being delivered in a reasonable timeframe are due to technical obstacles or unreasonable costs, an annual improvement report can be waived. This will be subject to review by the regulator and based on evidence previously provided by the operator.

²⁰ Participants will still be required to comply with 'overall installation uncertainty thresholds' and submit annual verified reports.

²¹ Verification risk is defined in Article 3 (18) of the EU Monitoring and Reporting Regulation (EU MRR), and refers to the verifier's ability to reach a decision, e.g. if there are reasonable assurances that no material misstatements have been made by participants in annual verified reports. The UK will adopt this definition.

²² See EU Document 32018R2067 Articles 31 and 34

²³ Category A installations must report every 4 years, Category B installations every 2 years, and Category C installations every year. All of these improvement reports must be submitted by 30 June.

130. **We propose** to follow this approach for a UK ETS, irrespective of the final Phase IV position. **These proposals would also apply to a carbon tax.** Participants would still need to justify not delivering an improvement report and a mandatory minimum frequency of improvement reporting will ensure that monitoring methodologies are still assessed regularly.

Simplification of Monitoring Plans

131. For EU ETS Phase III compliance, monitoring plans outline a site's production activities, sources, source streams and applied methodologies. Member States can introduce simplified monitoring and reporting plans for 'simple emitters', but this has not been implemented by the UK.²⁴
132. **We propose** to maintain this power in domestic regulations for a UK ETS and align with any Phase IV changes on issuing standardised monitoring plans.

Exclusion of certain activities as 'significant changes to the monitoring plan' warranting notification to the regulator

133. Article 15 of the EU Monitoring and Reporting Regulation (EU MRR) lists modifications to the monitoring plan which are considered significant in Phase III of the EU ETS. Phase IV will provide greater clarity over the definition of 'significant change' and we plan to adopt this as a useful starting point.
134. **We propose** that a change in the default value for calculation factors should no longer constitute a 'significant change'. To maintain transparency and accuracy under MRV, operators will still be required to monitor other significant and non-significant changes.

Consultation Questions

- 33
- a) Do you agree with any (or all) of the proposals for MRV simplification in a UK ETS? (Y/N)
 - b) Do you agree to those proposals that would also apply to a Carbon Tax? (Y/N)
 - c) Please expand on your answers, providing supporting evidence where possible.

²⁴ There has hitherto been little guidance on what constitutes a 'simple emitter', so this provision has not been utilised fully across the EU ETS. The European Commission recently issued guidance on these types of monitoring plans as part of the Phase IV review of MRV.

Enforcement, Appeals and Penalties

Enforcement and Appeals

135. A UK ETS will require a robust and proportionate enforcement system. The enforcement of all obligations will be carried out by the relevant environmental regulators. In addition, BEIS is responsible for enforcing compliance for offshore installations via OPRED.
136. The trading of allowances is regulated under the EU Market Abuse Regulation (EU MAR) by the Financial Conduct Authority (FCA). The EU MAR will be ‘on-shored’ into domestic regulations and will provide this market oversight for a UK ETS.
137. A UK ETS will require an equally robust and proportionate enforcement system and **we propose** to maintain the current arrangements under the EU ETS for enforcement and appeals. Regulators will retain the power to serve enforcement notices on participants who have contravened, are contravening or are likely to contravene provisions in the legislation.
138. For the appeals process, the First Tier Tribunal in England and Wales, Scottish Ministers in Scotland and the Planning Appeals Commission in Northern Ireland could continue to rule on appeals made against the regulators, if we maintain a system of civil rather than criminal sanctions, and the domestic courts would continue to ensure the participants have legal routes to ensure the domestic legislation is being applied appropriately.²⁵

Penalties

139. Environmental regulators will retain the power to impose civil penalties on participants who are in breach of their obligations as per the current process in the EU ETS.²⁶ Except changes indicated below, the level and process for applying the majority of penalties will remain unchanged. For example, significant fines are imposed if companies fail to comply by surrendering sufficient allowances in time.

²⁵ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/423772/Appeals_Guidance_EU_ETS_reporting_year_2013_onwards.pdf

²⁶ For information on the current arrangements for enforcement, appeals and penalties, see Parts 5, 8 and 7 respectively of the Greenhouse Gas Emissions Trading Regulations 2012 (<http://www.legislation.gov.uk/ukxi/2012/3038/contents/made>), the EU ETS Directive 2003/87/EC (<https://eur-lex.europa.eu/legal-content/en/ALL/?uri=CELEX%3A32003L0087>) (Article 16), the EA's enforcement and sanctions policy (<https://www.gov.uk/government/publications/environment-agency-enforcement-and-sanctions-policy/environment-agency-enforcement-and-sanctions-policy>), the SEPA guidance on the EU ETS (<https://www.sepa.org.uk/regulations/climate-change/eu-emissions-trading-system/>), the NIEA guidance on the EU ETS (<https://www.daera-ni.gov.uk/articles/euets-fees-charges-and-civil-penalties>), the NRW guidance on the EU ETS (<https://naturalresources.wales/about-us/what-we-do/how-we-regulate-you/regulatory-responsibilities/?lang=en>) and the EU ETS sanctions guidance for offshore installations (https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/450988/EU_ETS_sanctions_guidance.pdf).

140. Where appropriate and relevant in the context of a UK ETS, **we propose** to implement the changes outlined in Chapter 4, section E, of this consultation as part of the design of a UK ETS. This includes the suggested penalty changes set out in Annex C. These would minimise administrative burdens for operators, aircraft operators and regulators, and ensure penalties remain effective, dissuasive and proportionate.

Consultation Questions

- 34
- a) Do you agree with these proposals for the arrangements in relation to Enforcement, Appeals and Penalties as described above? (Y/N)
 - b) Please expand on your answer, providing evidence in support of your response where possible. Concerns about a change in penalties in general should be addressed through relevant questions in Chapter 4. Please reference the paragraph number (or regulation in question if this relates to a penalty change) of the change and the reasons why you believe it to be inappropriate.

Auctioning and Market Rules

Auctioning

141. It is important to ensure auctions are effective, and auctioning is fair, transparent, harmonised and non-discriminatory.
142. **We propose** to align the UK ETS arrangements for auctioning with those that are currently in place for Phase III of the EU ETS as described below. It is possible that the EU Auctioning Regulation may be updated ahead of Phase IV. We will consider whether any changes to the EU Auctioning Regulation should be reflected in a UK ETS's auction processes.
143. The UK currently opts out of the EU's Common Auction Platform²⁷ and therefore has an existing UK Auction Platform.

²⁷ A platform delivered from an optional joint procurement exercise, designed to reduce costs for both bidders and Member States who participate.

144. The current UK auctions for the EU ETS operate as single round, uniform-price, sealed bid auctions. Participants submit private bids containing the volume of allowances they want and the price they are willing to pay during a single 2-hour window, without knowing what others have bid. Once the single round of the auction closes, disorderly behaviour and market abuse checks are conducted by the auction operator. When these have been passed, the clearing process begins; bids are ordered from highest to lowest price, regardless of volume, and allowances are allocated to bidders in bid-price order until all available allowances have been allocated.
145. The Clearing Price is the price for which the last successful 'bid volume' of allowances in this process is sold, which all successful bidders pay, regardless of their respective bid price. This process has advantages over multi-round auctions (where participants have to take part in further rounds of bidding to progress with the auction) due to lower transaction costs, greater transparency, and simplicity in operation. **We propose to** retain this process which would encourage involvement and provide continuity for participants.

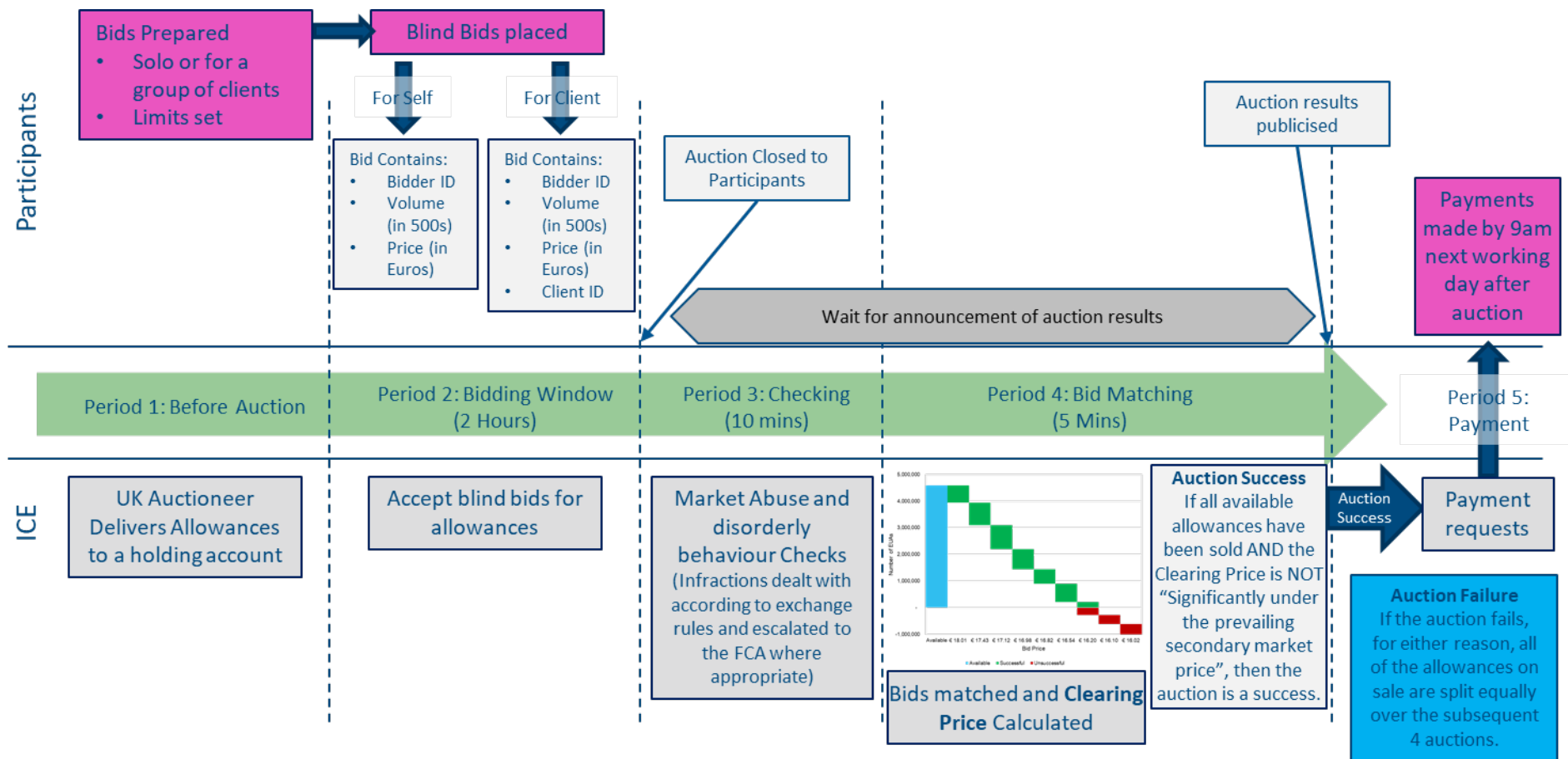


Figure 2 Current Auctioning Process

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146. Subject to certain application checks, the auctions (and secondary markets) are open to a wider market than just EU ETS operators. Wider participation can aid market liquidity and support price stability. We therefore plan to adopt a similar approach to participation in a UK ETS. Ensuring similar levels of accessibility to auctions and markets would also support a linked system.
147. **We propose** to continue to enable the UK Auction Platform to have the ability to apply bid limits to individual bidders if potential disorderly behaviour is detected.
148. Currently, UK auctions take place each fortnight with the annual number of allowances to be sold being distributed over the course of the year, with fewer available during the summer months in line with lower demand for that period. However, UK operators can currently purchase allowances from the EU Common Auction Platform and other national auctions, which means that EU ETS auctions take place almost daily.
149. The exact frequency of auctions and volume of allowances to be sold in each auction will be determined and publicised in advance by the auctioneer as at present. These responsibilities and this flexibility over the auction calendar will be retained in a UK auction process to best ensure availability of allowances.

Proposed Changes to Auctioning in a Standalone UK ETS

150. Under current EU ETS rules, auctions only succeed (or clear) if two criteria are met:
- a. The Clearing Price is not significantly below the prevailing secondary market price;
 - b. All available allowances are sold.
151. When auctions fail against either of these criteria, the regulations state that no allowances are sold and all allowances are redistributed evenly over the next four auctions.²⁸ This could create a “gap”, where no allowances enter the market for that auction period.

²⁸ For more information on the current auction process, see the guidance published by ICE Futures:
<https://www.theice.com/emissions/auctions>

152. In a standalone UK ETS, **we propose** that overall auction success should only be determined by the Clearing Price. This Clearing Price will be calculated as the lowest bid price received that meets two criteria – it is (i) at or above the Auction Reserve Price (the minimum price which an allowance can be sold for through auction – see Chapter 1) and (ii) not significantly below the prevailing secondary market price (as per the current process). All bids that meet these criteria, where allowances are available, are successful and all successful bidders then pay the Clearing Price. This should support a steadier flow of allowances into the market at a stable price point. This is because the likelihood of complete auction failure is lower and we are therefore less likely to experience the resultant higher volumes from inflated auctions and gaps in allowance availability created by failed auctions.
153. **We propose** that any unsold allowances would then be evenly spread over the next four scheduled auctions, as happens currently under Phase III rules, but that unsold allowances should not be redistributed more than the next four auctions out.
154. Additionally, **we propose** that no one auction should have more than 125% of its originally intended allowance volume. If successive auctions with unsold allowances result in a redistribution causing an auction to be inflated beyond 125% of its originally planned volume, the excess for that auction should be entered into a reserve.
155. This closely aligns with the current process of redistributing allowances over subsequent auctions with the added element that, if there is continued low demand or continued demand at a low price, which causes future auctions to become larger than intended, allowances can be moved into the reserve.
156. This process is illustrated below: Example Auctions A, B, C, D, E and F all have 4 million allowances planned for auction. If 1 million allowances from Auction A remain unsold, due to there being either too few bids or bids lower than the ARP, then these 1 million allowances will be spread evenly over auctions B, C, D and E. These now contain 250,000 more than their initially planned volume (4.25 million allowances each). This is illustrated below in Figure 3.

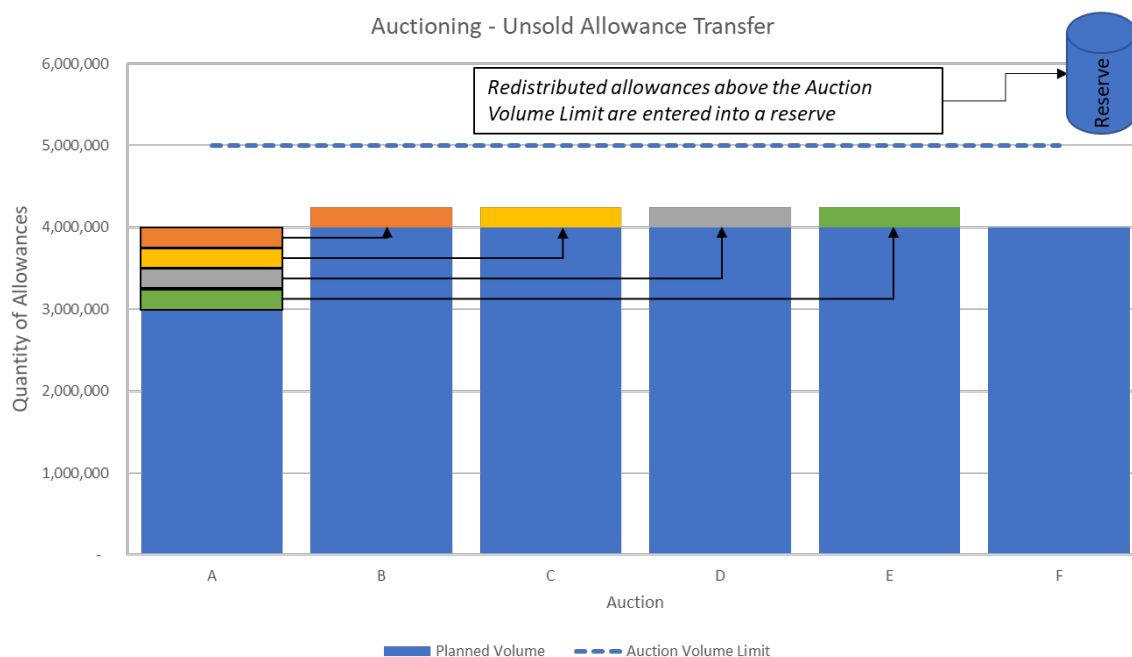


Figure 3 Redistribution of unsold allowances in successive auctions

157. In the event that the volume of successful bids is greater than the number of allowances available, the clearing process and allocation of allowances as per Phase III regulations will be used to determine which bidders have been successful.

Consultation Questions

- 35
- a) Do you agree with the proposals that the auction success criteria in a standalone UK ETS should be changed as described above? (Y/N)
 - b) Please expand on your answer, providing evidence in support of your response where possible.
 - c) Do you agree with the proposed method of redistributing unsold allowances across future auctions and a reserve? (Y/N)
 - d) Please expand on your answer providing evidence in support of your answer where possible.

Banking and Borrowing

158. In Phase III of the EU ETS participants can 'bank' surplus allowances without limitation and retain them for use in future years. This includes allowances held from previous phases.

159. Allowances from free allocation for the year ahead are distributed in February each year, and the date to surrender allowances for the previous year is two months later, by 30 April. Therefore, participants can use some or all of their new allocation to meet their previous year's compliance obligation. In effect, participants that receive free allocations may 'borrow' allowances from allocations for the current compliance year to meet the previous year's compliance obligation.
160. However, in the EU ETS, borrowing cross-phase is not permitted. Article 13 of the EU ETS Directive²⁹ states that allowances issued from January 2021 onwards shall "include an indication showing in which ten-year period beginning from 1 January 2021 they were issued, and be valid for emissions from the first year of that period onwards." This means for example, participants cannot borrow allowances from 2021 of Phase IV to meet their 2020 (Phase III) compliance obligations.
161. These arrangements of banking and borrowing for Phase III will apply within Phase IV; participants can continue to bank allowances from previous Phase IV years for use in Phase IV without limitation, and participants can also borrow allowances from their free allocation e.g. use freely allocated allowances from 2022 to meet their 2021 compliance obligations. However, borrowing free allocation in 2021 of Phase IV for compliance in 2020 of Phase III is not permitted.
162. **Our proposal** is that we align with these rules for a linked system.
163. In a standalone UK ETS, the benefits of banking surplus allowances should be balanced with ensuring the system effectively contributes to the UK's decarbonisation goals. We would therefore need to consider any rules regarding banking in the context of overall system design and any advice from the Committee on Climate Change.

Consultation Questions

- 36
- a) Do you agree that banking and borrowing arrangements in a UK ETS should mirror those of Phase IV in the EU ETS as described above? (Y/N)
 - b) In the case of a standalone UK ETS, how can we best balance the potential ability to bank allowances with the UK's wider decarbonisation goals?
 - c) Please expand on your answer, providing evidence in support of your response where possible.

²⁹ Of the EU ETS Directive 2018/410:

https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2018.076.01.0003.01.ENG&toc=OJ:L:2018:076:TOC

Governance

164. A UK ETS would need its own governance framework to provide stability and confidence for participants and wider stakeholders. It would also serve as a mechanism to set rules and regulations, ensure compliance, provide a fair market for participants, assert a judicial process (including to manage appeals), and provide the appropriate channels for scrutiny and advice. We propose to largely align the various functions and bodies in a UK ETS with those that already exist in the EU ETS.
165. The EU ETS comprises core functions which are set out below, together with the bodies that currently undertake these functions while the UK remains a participant in the EU ETS:
- a. The Authority (the European Commission).
 - b. The Environmental Regulator which is comprised of the relevant environmental regulators in the UK; the Environment Agency (EA) (acting as National Administrator for the Registry), the Scottish Environment Protection Agency (SEPA), Natural Resources Wales (NRW) and Northern Ireland Environment Agency (NEIA), as well as the Offshore Petroleum Regulator for Environment and Decommissioning (OPRED) for offshore activity.
 - c. The Financial Regulator (the Financial Conduct Authority (FCA)).
 - d. The Judicial Process (a combination of UK Courts and CJEU).
166. It is our aim to broadly mirror this structure and these responsibilities for a UK ETS. Where bodies are already undertaking these functions across the UK, we intend for them to continue to do so e.g. the Environmental regulators. The role of the Authority will be undertaken by the UK Government and the Devolved Administrations in line with their respective powers and responsibilities.
167. A linked system would necessitate a governance structure to maintain oversight and administration of the linked UK-EU carbon market. The precise structure and nature of governance arrangements would be subject to negotiation.

Establishing a UK Registry

168. The Consolidated System of European Registries (CSEUR) includes the UK part of the EU ETS Union Registry and the UK Kyoto Protocol (KP) National Registry.³⁰

³⁰ UK participants and traders in the European Union Emissions Trading System (EU ETS), the Kyoto Protocol Clean Development Mechanism (CDM) and the Joint Implementation (JI) hold accounts in the CSEUR.

169. The CSEUR is an online system of accounts operated by the European Commission, ensuring accurate accounting of allowances issued under the EU ETS and international credits issued pursuant to the Kyoto Protocol. It also records transfers of allowances and international credits, verified emissions and allowances surrendered by EU ETS participants.
170. In a UK ETS, there would be a new UK Registry³¹ acting as both the UK ETS registry and a national registry to ensure the accurate accounting of international credits under the Kyoto Protocol (and potentially the Paris Agreement). However, unlike in previous phases, KP units will not be able to be converted to allowances nor do we currently envisage that the stationary sector will be able to surrender international offsets for compliance. This mirrors the EU approach and is without prejudice to ongoing reviews on how best to implement CORSIA for aircraft operators (see Chapter 3).
171. To ensure maximum continuity for UK Registry users, we propose to align the UK Registry domestic legislative framework with the EU Registry Regulation for Phase IV as closely as possible.³²
172. However, **the proposals outlined below would improve upon CSEUR rules by simplifying account administration and the surrender process.** These changes will reduce administrative burdens for UK Registry users without compromising the integrity and security of the system. Current domestic rights of appeal relating to usage of the registry will be maintained. Some of the proposals would be subject to negotiation in a linking scenario.
173. In a UK ETS, operators and aircraft operators that will be covered, and traders wishing to use the UK Registry, will all have to open accounts in the new UK Registry. We shall seek to simplify this account opening process as much as possible.

Rules for all accounts and Authorised Representatives

174. The following proposals would provide greater flexibility for all Account Holders, Authorised Representatives and the UK Registry Administrator.³³ These proposals aim to reduce cost, save time and simplify usage.

³¹ The procurement of a new UK Registry will be subject to a tender process.

³² The rules governing the CSEUR are set out in the [2013 EU Registries Regulation, which is being amended to deliver the requirements of Phase IV of the EU ETS](#).

³³ For the purposes of this document, the role of the UK Registry Administrator or similar body will likely be comparable to the Environment Agency's role as National Administrator in the CSEUR.

175. **We propose** to allow an Account Holder to change the roles of its appointed Authorised Representatives, including assigning a 'read only' role, without having to remove them from its account first. The ability to perform transactions in the UK Registry will be dependent on having the correct number of Authorised Representatives with the necessary powers, as determined by their assigned roles. Authorised Representatives can currently only perform actions permitted by the role that is assigned to them when they are initially appointed to the account (initiator, approver, and initiator and approver).³⁴ A change of role that expands the powers of an Authorised Representative may require the submission of additional information.
176. **We propose** to allow an Authorised Representative to remove itself from an account. This is important to ensure accounts are kept up to date, for example, when employees leave. The Account Holder and any other Authorised Representatives on the account would automatically be notified so that a replacement could be appointed if required.
177. **We propose** to allow the UK Registry Administrator to request any information it considers necessary in order to satisfy itself that the applicant or nominated Authorised Representative is fit and proper to participate in the UK Registry. The information required would closely mirror the minimum of information required currently by the EU Registry Regulations.³⁵ This flexibility would assist in cases where, for example, an applicant is having difficulty obtaining documents from their country of origin, information can be better assessed through electronic checks, or where the Registry Administrator needs more information to be satisfied that the applicant is fit and proper to participate in the UK Registry.
178. **We propose** that the mandatory requirements for an annual declaration by each Account Holder that its account information is still up-to date, accurate and true, and the triennial account review by the UK Registry Administrator, be replaced with a general power for the UK Registry Administrator to check and request the updating of account information on a regular basis as part of an ongoing review process. This will eliminate unnecessary administrative burdens for Account Holders who have kept their account information up-to-date.
179. Currently, a suspended account may be closed if the situation giving rise to the suspension is not resolved within a reasonable period. **We propose** that remedial action must be taken by a date specified in a notice requiring information. The minimum time specified would be 28 calendar days. If no remedial action is taken by this point, the account may be closed.

³⁴ Assigned roles for Authorised Representatives are being introduced in the [2019 EU Registries Regulation](https://ec.europa.eu/info/law/better-regulation/initiatives/ares-2019-86335_en) https://ec.europa.eu/info/law/better-regulation/initiatives/ares-2019-86335_en

³⁵ <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32013R0389>

Consultation Questions

- 37
- a) Do you agree with the above proposed changes to account administration relating to all accounts and Authorised Representatives? (Y/N)
 - b) Please expand on your answer, providing evidence in support of your response where possible.

Rules for Operator and Aircraft Operator Holding Accounts

180. The following proposals aim to reduce the administrative burden for Operator and Aircraft Operator Holding Accounts (OHAs and AOHAs) by simplifying the opening of accounts and the surrender of allowances.
181. **We propose** to allow the UK Registry Administrator to open OHAs and AOHAs with fewer than two Authorised Representatives. This would enable any free allocation or purchased allowances to be deposited into the account in preparation for compliance while due diligence checks are being performed. Accounts would only be fully operational (including having the ability to perform outbound trading transactions) once all necessary Authorised Representatives are appointed.
182. **We propose** to allow surrender by one Authorised Representative (with any role apart from the 'read only' role) as the default setting for an account in order to simplify compliance. The Account Holder would be able to change this setting and opt for two-person surrender at any time.
183. **We propose** to remove the need for verifier approval in the UK Registry where the emissions are entered by the UK Registry Administrator or uploaded into the UK Registry by the Regulator on behalf of the Account Holder.³⁶ The relevant Account Holders would be notified if this were the case. These emissions would already have been verified in the course of the annual emissions reporting process.
184. **We propose** to allow the UK Registry Administrator to open OHAs or AOHAs which are marked as 'closure pending',³⁷ solely in order for an Account Holder to fulfil an outstanding obligation to surrender or return an over-allocation.

³⁶ Verifier approval would still be required where emissions were entered in the UK Registry by the Account Holder.

³⁷ New account status introduced in the 2019 EU Registries Regulation. Accounts in 'closure pending' status cannot be accessed, or any incoming or outgoing transactions performed.

185. We are also considering whether to allow direct transfers from a nominated third-party account (for example, a trader) into a UK Registry surrender account on behalf of an Account Holder.³⁸ This could benefit Account Holders who have to purchase allowances from a third party by removing the need to have them deposited into their account before they could be surrendered. The obligation to surrender sufficient allowances on time would remain with the Account Holder of the relevant OHA or AOHA, which would need to ensure any third party surrendered enough allowances on its behalf to meet its compliance obligation. However, before making a final decision we are also testing whether and which additional safeguards are required to this approach, to ensure the secure and transparent operation of the UK Registry.

Consultation Questions

- 38
- a) Do you agree with the above proposed changes to account administration relating to only operator and aircraft operator holding accounts? (Y/N)
 - b) Please expand on your answer, providing evidence in support of your response where possible.

Security and preventing criminal activities

186. When deciding to open accounts,³⁹ register verifiers accounts, or approve authorised representatives, **we propose** to allow the UK Registry Administrator to take into account any convictions or pending investigations in the preceding five years for fraud, money laundering, terrorist financing or other serious crimes. This will apply even if the crimes are not specifically related to allowances or criminal activity in the UK Registry. We believe this will better protect the UK Registry from serious criminal activity.

Consultation Questions

- 39
- a) Do you agree with these proposals intended to increase the security of the Registry and prevent criminal activities? (Y/N)
 - b) Please expand on your answer, providing evidence in support of your response where possible.

187. The following options are already provided by the EU Registry Regulation, but the UK has not chosen to apply them to date. We welcome views as to whether any of the options below would further enhance the security of the UK Registry and the integrity of the UK carbon market.

³⁸ This is currently possible in the Swiss ETS Registry.

³⁹ Without prejudice to the obligation of operators and aircraft operators to have accounts for compliance purposes.

- a. Require at least one Authorised Representative to be resident in the UK.
- b. Require Trading Account Holders to be resident in / have place of juridical registration / be registered for VAT in the UK.
- c. Only allow an individual, company, or other entity which has legal rights in the UK to hold Trading Accounts.

Consultation Question	
40	<ul style="list-style-type: none">a) Would one or several of the options above further enhance the security of the UK Registry and the integrity of the UK carbon market? (Y/N)b) Please expand on your answer, providing evidence in support of your response where possible.
41	<ul style="list-style-type: none">a) Are there further simplifications or improvements that could be made to the operation of a UK Registry? (Y/N)b) Please expand on your answer, providing evidence in support of your response where possible.

Chapter 3: Aviation

Summary

188. In the EU Emissions Trading System (EU ETS), there are design and operational elements particular to the aviation sector. The UK Government and the Devolved Administrations propose that a UK Emissions Trading System (UK ETS) include aviation to support the UK's climate commitments and to ensure that any UK ETS is at least as ambitious as the EU ETS, as committed to in the Clean Growth Strategy. This chapter details our proposals on aviation-specific considerations in a linked and standalone UK ETS, as well as how the scheme would interact with other aviation carbon pricing measures. Other elements of a UK ETS will apply to the aviation sector in the same way as they do to the stationary sector.

Introduction

189. The UK Government's and the Devolved Administrations' objective is to ensure that the aviation sector continues to make a proportionate and cost-effective contribution towards delivering the UK's high climate ambition.
190. UK aviation accounts for around 7% of the UK's total greenhouse gas emissions.⁴⁰ This share is expected to increase over time as other sectors (such as power and manufacturing) decarbonise more quickly. This means that aviation could represent around a quarter of the UK's greenhouse gas emissions by 2050.⁴¹
191. The UK Government and the Devolved Administrations believe that international aviation emissions are best tackled at the international level. The UK was instrumental in reaching agreement on a global market-based measure for international aviation, the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA).⁴² We are committed to ensuring CORSIA is successfully implemented as widely as possible and will participate in the scheme's pilot phase from 2021.
192. However, we recognise that further international action takes time, so we are considering appropriate domestic action to support international progress, encourage innovation and deliver on our climate commitments.

⁴⁰ CO₂ emissions from UK departing aircraft (international and domestic flights). Department for Transport analysis of Department for Business, Energy and Industrial Strategy (2016): Final UK Greenhouse Gas Emissions National Statistics

⁴¹ <https://www.theccc.org.uk/publication/the-fifth-carbon-budget-the-next-step-towards-a-low-carbon-economy/>

⁴² <https://www.icao.int/environmental-protection/CORSIA/Pages/default.aspx>

193. Domestic aviation emissions count towards the UK's legally binding 2050 emissions reduction target under the Climate Change Act (2008).⁴³ Although international aviation emissions do not currently count towards this target, the UK Government and the Devolved Administrations want to set a clear level of climate ambition on these emissions. Therefore, the UK Government is separately consulting on the proposal that CO₂ emissions from UK-departing flights should be at, or below, 2005 levels in 2050, as recommended by the Committee on Climate Change.⁴⁴
194. The aviation sector has been part of the EU ETS since 2012, contributing to reducing Europe's carbon footprint by more than 17 million tonnes of CO₂ per year.⁴⁵ In light of the UK's exit from the EU, we have developed policy proposals to include aviation in either a linked or a standalone UK ETS. These proposals reflect the commitments in the Clean Growth Strategy to have a future scheme which is at least as ambitious as the existing scheme.
195. The UK Government recognises that complying with multiple schemes poses a potential challenge for aircraft operators and seek to ensure that our future approach minimises complexity whilst meeting our climate ambitions. We are therefore considering carbon pricing options that will work alongside CORSIA, acknowledging that aircraft operators should not have to pay for the same tonne of CO₂ emissions under multiple schemes.
196. CORSIA will be a major contributing factor to international aviation achieving carbon neutral growth from 2020.⁴⁶ The scheme requires qualifying aircraft operators to offset the growth in international aviation CO₂ emissions covered by the scheme above average 2019 and 2020 levels and will, therefore, make an important contribution to the UK's climate ambition.⁴⁷
197. In the EU ETS, the cap on emissions is set in a way that leads to higher climate ambition than CORSIA currently does, for emissions reductions on flights between the UK and the rest of the European Economic Area (EEA).⁴⁸ Unlike CORSIA, the EU ETS also addresses emissions from domestic aviation. For these reasons, we are considering policy options that will complement CORSIA and deliver against a high level of climate ambition.

⁴³ <https://www.legislation.gov.uk/ukpga/2008/27/part/1/crossheading/the-target-for-2050>

⁴⁴ <https://www.gov.uk/government/consultations/aviation-2050-the-future-of-uk-aviation>

⁴⁵ https://ec.europa.eu/clima/policies/transport/aviation_en

⁴⁶ A goal set by the International Civil Aviation Organisation (ICAO)

https://www.icao.int/Meetings/a38/Documents/Resolutions/a38_res_prov_en.pdf

⁴⁷ Offsetting is a way to compensate for greenhouse gas emissions by funding an equivalent emissions reduction elsewhere where it is more cost effective. Under CORSIA, offsets will represent a permanent reduction of CO₂ emissions that cannot be reversed. The projects that will fall under these criteria are yet to be determined.

⁴⁸ In total from 2021-2030 as the two schemes currently stand, we estimate the total emission savings on flights between the UK and the EEA under CORSIA are only approximately a third of the total emission savings on flights between the UK and the EEA under the EU ETS.

198. We are aware that the main rules for aviation in the EU ETS may change before 2023. The EU ETS for aviation will be subject to an EU review in light of the international developments related to the implementation of CORSIA (hereafter referred to as the 'EU future review'). Any UK ETS scheme, linked or otherwise, will consider the outcome of this review.
199. We are exploring what obligations to apply to aircraft operators on routes currently covered by the EU ETS. In any case, a UK ETS would apply to aircraft operators regardless of their country of registration, promoting fair competition.

Inclusion of aviation in a UK ETS

200. This consultation chapter explains how the aviation sector could be included in a UK ETS, both linked and standalone. It covers the following elements:
- a. Specific considerations for aviation in a linked ETS
 - b. Routes: Which routes would have obligations under the scheme
 - c. Cap: Aviation's contribution to the overall cap on emissions
 - d. Allocation methodology: How allowances should be distributed
 - e. Exemptions: Who would be part of the scheme
 - f. Monitoring, Reporting and verification (MRV): How emissions would be measured
 - g. Phases: How the rules may change over time
201. The CORSIA section also discusses how CORSIA obligations could be addressed in a UK ETS. Other aspects of a UK ETS will apply to the aviation sector in the same way as to the power and energy intensive industry sectors and are discussed in Chapter 1 of this consultation.

Specific considerations for aviation in a linked ETS

202. The UK Government and the Devolved Administrations recognise that many aircraft operators participating in a UK ETS would also be participating in the EU ETS. Linking a UK ETS to the EU ETS offers particular benefits for aviation. With linking, allowances from either system would be eligible for compliance.
203. The interchangeability of allowances should lead to the price of allowances converging, so that there is a single carbon price across a UK ETS and the EU ETS. This would mean that an aircraft operator faces the same carbon price across all the flights it operates that are in scope of these systems, contributing to the smooth functioning of the aviation market.

- 204. If linking to the EU ETS, we propose to set the exemption rules for a UK ETS so that an aircraft operator would have obligations under both systems or neither. This would simplify operators' compliance experience.
- 205. To further simplify compliance, we would explore a simplified reporting arrangement with participating countries, where aircraft operators would be administered by one state: either the UK or a European Economic Area (EEA) state. A 'one stop shop' approach would mean that an aircraft operator would only need to deal with one authority for all its compliance obligations under both a UK ETS and EU ETS, including having only one account for holding allowances.
- 206. The UK Government intends to discuss with the EU how best to address CORSIA obligations if a UK ETS were to link to the EU ETS, including the points detailed in the below section: CORSIA interaction with a UK ETS.

Aviation in the EU ETS Phase IV

- 207. Phase IV (2021-2030) is the next trading period in the EU ETS. Revisions have been made to Phase IV to enable the EU ETS to achieve the EU's 2030 emissions reduction targets. Please see Chapter 4 for further detail on the proposed amendments to UK legislation for Phase IV.
- 208. The EU ETS places obligations on intra-EEA flights. Currently, in Phase III of the EU ETS (2013-2020), the annual cap for aviation within the EEA (the maximum amount of greenhouse gas emissions allowed to be emitted in the system) equates to around 38MtCO₂eq emissions. The aviation sector has its own allowances but can also use allowances from the stationary sector. In Phase IV, the stationary sector will also be allowed to use allowances from the aviation sector, making EUAAs (EU Aviation Allowances) and EUAs (EU Allowances) interchangeable.
- 209. The Phase IV revisions aim to increase the pace of emissions cuts across participating sectors, including aviation, by reducing the overall number of emission allowances using the Linear Reduction Factor (LRF).
- 210. In the current phase of the EU ETS, 82% of the aviation allowances in the aviation cap are allocated to aircraft operators for free, 15% are auctioned and 3% were held in a special reserve for new entrants and fast growers. In Phase IV of the EU ETS, aircraft operators who benefited from the Phase III special reserve will continue to receive their top-up of allowance. However, the special reserve will be closed to any new applicants.
- 211. In Phase IV, the amount of free allocation an operator receives will continue to be based on tonne-kilometre (tkm) activity data from 2010 and, for those who were eligible for the special reserve, 2010-2014. The aviation benchmark determines how many free

allowances an aircraft operator receives per 1,000 tkm flown and was calculated by dividing the total amount of free allowances (82% of the aviation cap) by the total tkm of eligible aircraft operators in 2010. The benchmark is currently 0.6422 allowances per 1,000 tkm and will reduce in line with the LRF.

212. There will be no change in the criteria (or thresholds) that determine whether aircraft operators qualify for the EU ETS in Phase IV. For example, any aircraft operators exempt from surrendering allowances in Phase III will also be exempt in Phase IV. The EU is amending the MRV rules for aviation to align with new CORSIA requirements.
213. The EU and Switzerland have agreed to link the EU ETS and the Swiss ETS. Once this agreement comes into force, the EU ETS will include flights from the EEA to Switzerland, whilst the Swiss ETS will include flights from Switzerland to the EEA.

Routes

214. Currently, the EU ETS reporting and surrendering obligations apply to intra-EEA flights. They will also apply to flights from the EEA to Switzerland once the linking agreement between the EU and Switzerland comes into force.
215. We expect that the EU ETS without UK participation would exclude the following flights:
- a. Domestic UK flights
 - b. Flights between the UK and the EEA
 - c. Flights from the UK to Switzerland.
216. We also expect the Swiss ETS to exclude flights from Switzerland to the UK.
217. We have therefore considered several options for the routes to include in either a linked or a standalone UK ETS:
- Option 1:** Domestic UK flights
 - Option 2:** Domestic UK flights, flights from the UK to the EEA
 - Option 3:** Domestic UK flights, flights from the UK to the EEA, flights from the UK to Switzerland – Preferred option
 - Option 4:** Domestic UK flights, flights from the UK to the EEA, flights from the EEA to the UK
 - Option 5:** Domestic UK flights, flights from the UK to the EEA, flights from the EEA to the UK, flights from the UK to Switzerland, flights from Switzerland to the UK

218. All the options include domestic flights, which are in the scope of the UK's carbon budgets and 2050 target for emissions reductions established by the Climate Change Act 2008.
219. **We propose** Option 3 for a UK ETS, for the following reasons:
- a. The UK's international aviation emissions are measured on departing flights.⁴⁹ Including departing flights to both the EEA and Switzerland in a UK ETS will support the UK to be at least as ambitious as the EU ETS.
 - b. It is our assumption that UK arriving flights would be included in the EU ETS and the Swiss ETS in the future, ensuring that there are no gaps in coverage.
220. For clarity, the other elements of a UK ETS are described with reference to this proposal.
221. If it is not possible to cover departing flights to both the EEA and Switzerland from the start of a UK ETS, a narrower set of routes could apply initially, for example: domestic flights and UK to EEA flights (Option 2); or domestic flights only (Option 1); expanding to cover the routes in Option 3 in the future.

Consultation Questions

- 42
- a) Do you agree with the proposed routes (Option 3) to be covered by a UK ETS? (Y/N)
 - b) Please expand on your answer, providing evidence in support of your response where possible.

Cap and Trajectory

222. The aviation component of a UK ETS cap would be calculated to ensure that it is at least as ambitious as our proportional share of the EU ETS cap, whether it is standalone or linked. The aviation component of a UK ETS cap would then reduce annually in proportion to the declining trajectory of the overall UK ETS cap. The cap and trajectory will be informed by recommendations from the Committee on Climate Change (CCC) and reflect the UK's climate change targets. For information about the overall UK ETS cap (see Chapter 1).
223. In order to maximise opportunities for cost effective emissions reductions across a UK ETS, **we propose** that all allowances in the scheme should be interchangeable between participating sectors, as per Phase IV of the EU ETS. This would mean that stationary operators could use aviation allowances to meet their obligations, and vice versa.

⁴⁹ While there is no international agreement on how to allocate international aviation emissions to states, the Committee on Climate Change's advice is based on UK departing flights.

Consultation Questions

- 43
- a) Do you agree that the aviation component of a UK ETS cap and trajectory should be calculated to ensure that it represents a level of ambition at least as ambitious as our proportional share of the EU ETS cap? (Y/N)
 - b) Please expand on your answer, providing evidence in support of your response where possible.

Allocation Methodology

224. In the EU ETS, the distribution of allowances to aircraft operators is split between free allocation and auction share (see Aviation in the EU ETS Phase IV). To help safeguard competitiveness in a UK ETS, aircraft operators would receive an allocation of free allowances. This free allocation would reflect the aircraft operator's activity on the routes covered by a UK ETS.
225. The principle for determining this free allocation for a UK ETS would be to ensure a smooth transition by scaling down the aircraft operator's historic EU ETS allocation level, in proportion to the share of its routes that fall under a UK ETS relative to the historic EU ETS scope. For example, an aircraft operator may be due 500,000 free allowances when the UK is participating in the EU ETS. If the UK is not participating in the EU ETS, the aircraft operator could receive 100,000 free allowances from a UK ETS if 20% of its activity was on routes within a UK ETS.
226. The free allocation to aircraft operators would reduce annually in proportion to the declining trajectory of the overall UK ETS cap.
227. This proposal will be subject to review following close of the consultation and receipt of advice from the CCC on the overall UK ETS cap. The review would seek to ensure that any impact on free allocation from finalising the cap, in light of the above factors, is appropriate. In a linked scenario, there would need to be a negotiation with the EU, which may alter proposals.
228. In Phase IV of the EU ETS, the EU future review will consider whether there should be any revision to the auction share for aircraft operators. We will consider the findings of this review and may alter the distribution of allowances in a UK ETS accordingly.
229. In operationalising these principles, we propose to mirror the EU ETS methodology to determine free allocation. This uses activity data and is explained in the Aviation in the EU ETS Phase IV section. As well as minimising disruption to aircraft operators, this approach would likely reduce administrative burden on operators, as we intend to use the 2010 and 2010-2014 tkm data that aircraft operators have already supplied to European

regulators. If this approach to data collection is not possible, we are proposing to ask aircraft operators to submit their 2010 tkm data and 2010-2014 tkm data (if benefiting from the special reserve) in order to receive free allocation.

Consultation Questions	
44	<p>a) Do you agree with the proposed approach to determining free allocation of allowances for the aviation sector? (Y/N)</p> <p>b) Please expand on your answer, providing evidence in support of your response where possible.</p>
45	<p>a) Do you agree with the proposal to ask aircraft operators to submit their 2010 tkm data and 2010-2014 tkm data (if benefiting from the special reserve) should it not be possible to obtain this data from European Regulators? (Y/N)</p> <p>b) Please expand on your answer, providing evidence in support of your response where possible.</p>

Exemptions

230. Cost effective abatement is best achieved by covering as many operators as possible under emissions trading. However, the UK Government and the Devolved Administrations recognise that small emitters face a higher cost of compliance per tonne of CO₂ than larger emitters, and that their individual contribution to emissions is marginal. We are considering what level of participation in a UK ETS would be proportionate among small emitters.
231. The EU ETS and CORSIA apply minimum thresholds over which aircraft operators must participate in the schemes, based on emissions, weight and for the EU ETS only, number of flights. Both schemes also set out which categories of flights must participate, along with applying emissions thresholds under which an aircraft operator is able to follow simplified reporting procedures.
232. In a UK ETS that is linked to the EU ETS, **we propose** to retain the current EU ETS thresholds and associated rules for exemption and simplified reporting. This would simplify an aircraft operator's compliance because it would either participate in both schemes, reporting to a single regulator for both, or not participate at all.
233. In a standalone UK ETS, **we propose** to set thresholds which (a) capture a similar proportion of emissions as currently captured under the EU ETS and (b) avoid placing obligations on operators with few flights from the UK. This would be achieved by defining the thresholds in relation to the routes in a UK ETS only.

234. The following example illustrates how this might work in principle. In the EU ETS, aircraft operators can use simplified reporting if their annual emissions are below 3,000 tonnes of CO₂ per year on intra-EEA routes. In a UK ETS, this threshold would be a smaller number to reflect the smaller number of emissions covered by the UK ETS (Domestic UK flights, flights from the UK to the EEA, and flights from the UK to Switzerland).
235. Some aircraft operators are currently exempt from the EU ETS because they meet another exemption criterion, such as having a light aircraft or performing flights for certain purposes (military, customs etc.). **We propose** to mirror these exemptions in both a linked and a standalone UK ETS.

Consultation Questions	
46	<p>a) For a linked UK ETS, do you agree that the EU ETS thresholds should be adopted? (Y/N)</p> <p>b) Please expand on your answer, providing evidence in support of your response where possible.</p>
47	<p>a) For a standalone UK ETS, do you agree that the thresholds should be defined in relation to the routes in a UK ETS only? (Y/N)</p> <p>b) Please expand on your answer, providing evidence in support of your response where possible.</p>
48	<p>a) Do you agree that both linked and standalone UK ETS should mirror all other EU ETS exemption criteria? (Y/N)</p> <p>b) Please expand on your answer, providing evidence in support of your response where possible.</p>

Monitoring, Reporting and Verification (MRV)

236. UK aircraft operators are subject to a well-established system of MRV, which underpins their compliance with the EU ETS (see Chapter 2). The UK Government and the Devolved Administrations recognise the importance of a functioning MRV process for aircraft operators, and that MRV requirements may differ between multiple carbon pricing schemes (i.e. CORSIA, the EU ETS, and a potential UK ETS). Therefore, in a UK ETS, we will seek to ensure that UK aircraft operators only need to follow one set of MRV rules to comply with all schemes.
237. The EU has consulted on amending the EU ETS MRV regulations to take into account the CORSIA Standards and Recommended Practices (SARPs) in time for the 2019-2020 monitoring phase, recognising the need to have one set of rules for all carbon pricing schemes.⁵⁰
238. In both a linked and a standalone UK ETS, we propose to align with the EU ETS MRV rules for aviation, on the basis that this will support UK aircraft operators facing a single set of MRV regulations. The UK Government and the Devolved Administrations acknowledge that these rules are not yet completely aligned with CORSIA and would seek to ensure that UK ETS rules are reviewed and improved over time.

Consultation Question

- 49
- a) Do you agree that MRV requirements for a UK ETS should align with the EU ETS? (Y/N)
 - b) Please expand on your answer, providing evidence in support of your response where possible.

Phases

239. **We propose** that aviation align with a UK ETS phase structure outlined in Chapter 1, which includes a 10 year first phase running from January 2021 to December 2030. This would mean that the scope of a UK ETS, including the routes covered, will continue throughout the whole of Phase I as a default. Given the EU future review, the UK also proposes to split aviation's Phase I into two sub-phases:

Phase I(a): start of phase-2023 (mirroring CORSIA's pilot phase)

Phase I(b): 2024-2030

⁵⁰ <https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=OJ:L:2018:334:FULL&from=EN>

240. Having two sub-phases will give a UK ETS the flexibility to incorporate CORSIA obligations while not affecting the core principles of a phase (Chapter 1). This will mitigate any disruption to the stationary sector by not having two distinct phases for aviation.

241. Figure 4 outlines the proposed phase structures for a UK ETS.

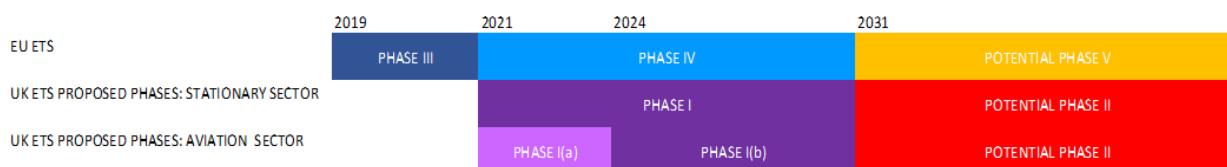


Figure 4 Phases timeline comparison

242. Chapter 1 proposes that a UK ETS as a whole will be reviewed in 2028, with changes to be implemented in time for Phase II (2031-2040). This would provide an opportunity to assess the effects of any major changes to aviation made in Phase I(a), such as any impact on environmental ambition, and allow for improvements to be made for the next phase.

Consultation Questions	
50	<p>a) Do you agree with the proposed phase structure for the inclusion of the aviation sector in a UK ETS? (Y/N)</p> <p>b) Please expand on your answer, providing evidence in support of your response where possible.</p>

CORSIA interaction with a UK ETS

243. CORSIA comes into effect in stages from 2021. Under any scenario for EU Exit, the UK will implement CORSIA. UK aircraft operators are currently complying with MRV on international flights for CORSIA and will the UK participate in its pilot phase from 2021-2023.

244. If linking a UK ETS to the EU ETS, alignment with CORSIA will be informed by discussions with the EU and the outcome of the EU future review. The European Commission produced an Impact Assessment in 2017 which outlines possible options for EU ETS-CORSIA interaction from 2021.⁵¹

⁵¹ https://ec.europa.eu/clima/sites/clima/files/swd_2017_31_en.pdf

245. In either a linked or a standalone UK ETS, measures will need to be taken so that aircraft operators will not have to submit two sets of allowances or offset credits for the same tonne of CO₂ emissions.
246. We are also considering the following opportunities to align a UK ETS with CORSIA, whether it is linked to the EU ETS or not. Greater alignment would reduce the complexity of complying with multiple schemes for aircraft operators.
- a. The first compliance year in which aircraft operators will have obligations to multiple carbon pricing schemes will be 2021. Unlike the one-year compliance cycles of the EU ETS, under CORSIA, operators will not need to offset and cancel any quantity of eligible emissions units corresponding to their offsetting requirements until 2025. So, there is the option to postpone the first UK ETS surrendering deadline for aircraft operators until 2025, to make it clear that aircraft operators do not need to pay twice for the same tonne of CO₂, while the rules of CORSIA-ETS interaction are still being agreed.
 - b. We will also consider whether an aircraft operator can use CORSIA eligible offset units to meet all or part of its UK ETS obligations once the international community has decided the list of programmes whose emissions units will be permitted for compliance under CORSIA.
 - c. As discussed in the exemptions section, we are aware that some aircraft operators will have obligations under the EU ETS but not CORSIA, and vice versa. If linking a UK ETS to the EU ETS, the priority will be to align the exemption rules for a UK ETS and the EU ETS, so that the two systems function smoothly together. In a standalone UK ETS, there is more scope to align the exemption rules with CORSIA.
247. In terms of dealing with multiple regulators, UK aircraft operators will already be reporting their emissions for CORSIA to the appropriate regulator (e.g. the Environment Agency). The only additional requirement from a UK ETS would be reporting domestic flights. Non-UK aircraft operators would need to report their UK ETS emissions in addition to reporting on CORSIA to their own state of registration. We will consider how this could be simplified by sharing data between states, for example.

Chapter 4: Continued UK Membership of the EU ETS for Phase IV

Introduction

248. The UK Government's preferred approach is to establish a UK ETS linked to the EU ETS, rather than to remain in the EU ETS beyond the end of Phase III. However, it is prudent to include within this consultation consideration of Phase IV of the EU ETS. While we remain a member of the EU, the UK has a legal obligation to transpose the Phase IV Directive. A number of implementation features may also be relevant to a UK ETS. This chapter sets out and seeks views on the business as usual amendments to UK legislation which are necessary to implement the changes to the EU ETS Directive for Phase IV and further discretionary improvements we propose to make.

The revised ETS Directive and Phase IV of the EU ETS

249. Phase IV of the EU ETS will run from 2021-2030. The reforms to the EU ETS Directive for Phase IV were agreed in February 2018 and will take effect from January 2021. The revised ETS Directive was published in the Journal of the European Union on 8 April 2018⁵² and Member States have 18 months from this date (until 9 October 2019) to amend their domestic legislation to transpose these reforms.

250. The revised ETS Directive is implemented in part by EU-level decisions and regulations (see 'Tertiary legislation' below), some of which are still being negotiated at EU level. In addition to this, Member States need to make legislative provisions to ensure the overarching EU legislation has the desired legal effect domestically.

251. The EU ETS is transposed in the UK by the Greenhouse Gas Emissions Trading Scheme Regulations 2012 (SI 2012/3038 – the '2012 GHG Regulations') as amended. The UK needs to update these regulations both to deliver on our current legal obligations to transpose the 2018 ETS Directive and to keep open the option of the UK potentially participating in Phase IV of the EU ETS from January 2021.

252. Many of the changes we will make to the 2012 GHG Regulations are required by the revised ETS Directive and are non-discretionary for Member States. However, there are two main areas where Member States have discretion over implementation of the revised ETS Directive where the UK is proposing to make changes from Phase III. These are the

⁵² <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32018L0410&from=EN>

schemes for small emitters opt-outs outlined in Articles 27 and 27a of the revised ETS Directive.

253. Article 27 (small emitters)⁵³ allows some installations (see 'C. Article 27 Provisions' below on eligibility) to opt-out from many compliance requirements of the EU ETS, while still being subject to some baseline provisions, e.g. Monitoring, Reporting and Verification (MRV). Obligations are reduced from those of the main scheme, providing that the Member State introduces equivalent measures that achieve the same emissions reductions from these installations. The UK offered this through the Small Emitter and Hospitals Opt-out Scheme in Phase III and proposes to continue to do so in Phase IV.
254. Article 27a (ultra-small emitters) is a new provision for Phase IV that allows for installations emitting less than 2,500t CO₂eq per annum to be exempt from the main compliance requirements of the EU ETS, with no equivalent measures to ensure equivalent emissions reductions required. The UK proposes to offer elements of this derogation for Phase IV.
255. We are also seeking to use this opportunity to simplify and improve the UK's legislative framework for Phase IV of the EU ETS. Our aim is to reduce the complexity and regulatory burden of the current legislation for EU ETS participants and regulators and ensure the provisions are robust and fit for purpose.
256. Therefore, we seek to gain stakeholder feedback **on our proposed approach** to the EU ETS in Phase IV:
- a. to transpose the mandatory elements of the revised ETS Directive into domestic legislation;
 - b. to implement provisions arising from EU tertiary legislation;
 - c. to implement discretionary Article 27 provisions for Phase IV;
 - d. to implement discretionary Article 27a provisions for Phase IV;
 - e. to further the changes we are seeking to make to the 2012 GHG Regulations, to facilitate administrative simplicity and effectiveness for operators and regulators; ensure penalties are effective, dissuasive and proportionate; provide clarity; and close loopholes.
257. As highlighted in Chapter 3, the EU ETS also covers intra EEA-flights (any flight both taking off and landing in the EEA). While some of the changes proposed in this chapter (e.g. content on Articles 27 and 27a) will only affect stationary installations in the ETS, there are some changes that will apply to all operators, including aircraft operators, and we welcome any feedback on these points from aircraft operators.

⁵³ Throughout the consultation, whenever we are referring to the Article 27 and Article 27a installations we are referring to small emitters and ultra-small emitters respectively.

258. Furthermore, as with the rest of this chapter, any proposed changes to UK legislation proposed here are without prejudice to any future relationship with the EU and are designed to ensure that the UK has the legal basis in place for continued participation of the EU ETS from 2021, should this be agreed through exit negotiations. This caveat extends to any applicability of the proposed provisions to the aviation ETS.

How and when we intend to transpose Phase IV changes into domestic legislation

259. Climate change is a devolved matter. However, since the outset of the EU ETS in 2005 the Devolved Administrations have agreed to the UK Government making implementation arrangements on a UK-wide basis via UK statutory instruments.
260. If this transposition were taking place prior to EU Exit, we would use a combination of our powers in the Pollution Prevention and Control Act 1999 (PPCA) and section 2(2) of the European Communities Act 1972 (ECA) to transpose on a UK-wide basis. The PPCA will be unaffected by EU Exit, but the European Union (Withdrawal) Act 2018 will repeal the ECA. However, the UK Government intends that the European Union (Withdrawal Agreement) Bill will amend the EU (Withdrawal) Act 2018 so that the effect of the ECA is saved for the time-limited Implementation Period, meaning we will still have the ECA powers to transpose the Phase IV changes during the Implementation Period.
261. Our intention is to transpose the Phase IV changes outlined in the consultation across two Statutory Instruments (SIs).
- a. All changes to the Phase IV Directive that result in the need for domestic transposition will be transposed into domestic UK law before the transposition deadline of 9 October 2019.
 - b. Changes to EU tertiary legislation made as part of Phase IV that result in the need for changes to our domestic legislation (see section B below) but that are not agreed at the EU level in time for the Phase IV transposition deadline will be transposed through a separate SI in 2020, along with the majority of changes outlined in section E of this chapter.
262. The second SI (b) is after the date of EU Exit. However, the UK will still be a member of the EU ETS at this point, by virtue of the Implementation Period established by the Withdrawal Agreement.
263. The specific mandatory Phase IV reforms set out in the Directive have been agreed at EU level and must be transposed (section A above), so we are not actively seeking views on these reforms. However, we welcome any views stakeholders may have on the proposed approach to transposition we have set out.

Consultation Questions

- 51 a) Do you think the proposed timeline and method for the legal transposition of the Phase IV Directive and tertiary legislation are reasonable? (Y / N)
b) Please expand on your answer and give evidence where possible.

A. Transposition of mandatory elements of the Phase IV Directive

264. The Phase IV reforms include a wide range of changes to the operation of the EU ETS that are designed to ensure that the system continues to drive emissions reduction at the lowest cost, incentivising investment in low-carbon technologies while protecting European industry from the threat of carbon leakage. Some of these reforms need to be transposed into UK law. In this section, we set out the areas where we plan to make changes to our domestic legislation, and the process by which we propose to do so.
265. In Phase IV, installations' free allocation of allowances ("allocation") will be more flexible, increasing and decreasing to reflect changes in their activity level. For an installation to have their allocation increased or decreased, their activity level must increase or decrease by at least 15% compared to their Historical Activity Level (see Chapter 1) over a two-year rolling average. This replaces the approach in Phase III of adjusting an installation's allocation based on significant increases or reductions in capacity and partial cessations. The details of the allocation changes are partly implemented through the Directive and partly through measures that support, amend or implement the Directive via supporting legislation or acts (tertiary legislation). These changes require subsequent amendments to the 2012 GHG Regulations, for example in making the requirement to annually report these data form part of an operator's permit.
266. The removal of adjusting allocation based on significant increases or reductions in an installation's capacity means the treatment of new entrants into the EU ETS will also change. In Phase IV, new entrants will receive free allocation based on an activity level set by the first calendar year of normal operation, which will then be adjusted based on a two-year rolling average as outlined above.
267. The UK chooses to offer compensation to certain sectors for the indirect costs of the EU ETS passed on through electricity prices, in line with the ETS Directive and State Aid rules. As part of the Phase IV reforms, from 2018 Member States who choose to offer this compensation are required to report on an annual basis the amount of compensation provided at a sector and sub-sector level. We already comply with this requirement, and will add it to our domestic legislation, along with the requirement to report if the compensation exceeds 25% of auction revenues.

268. In addition, there are further minor changes which will have very limited impact on operators but are legally necessary. For example:
- a. Dates and references will need to be updated in the 2012 GHG Regulations to reflect the updated EU legislation.
 - b. The requirement for a regulator to review a GHG permit at least every 5 years will need to be removed to reflect EU legislation.
 - c. References in domestic legislation to Article 10a(13) will need to be removed as this article no longer exists.
 - d. Domestic legislation will need to be updated to reflect the new distinction between 'trading period' (now every ten years) and 'allocation period' (two five-year periods that together comprise a trading period). There will be two NIMs data collection exercises for these allocation periods in Phase IV (2021-2025 and 2026-2030), which will take place in 2019 and 2024. The NIMs data collection exercises will be used to calculate Historical Activity level (HAL), benchmarks and are a chance to enter the Small Emitter Opt-out or the Ultra-small Emitter exemption schemes.

B. Tertiary Legislation

269. A range of relevant tertiary legislation is currently being discussed (or in some cases has been recently agreed) at European level. These include the Free Allocation Regulation (FAR), the Monitoring and Reporting Regulation (MRR), the Accreditation and Verification Regulation (AVR), the Registries Regulation and the Auctioning Regulation. Further discussions are planned in 2019 and 2020 for Regulations in these and other areas, including determining the details of the process by which free allocation will change to mirror changes in production of 15% or more.
270. The final outcomes of some of these discussions will not be known until after the deadline for Phase IV transposition, and in most cases these amendments will not require domestic transposition as they will be directly applicable in UK law (whilst the UK is a member of the European Union, or within the Implementation Period). However, some areas of tertiary legislation will require domestic transposition. Some of these areas are determined at the EU level, but others allow the UK to decide on how to best apply the legislation to UK installations.
271. We have outlined the areas of legislation likely to be affected and our planned approach. Where changes to domestic legislation are required, we intend to transpose these under the same powers as set out above.
272. Changes to the 2012 GHG Regulation required by the FAR:

- a. We will revoke all provisions relating to the implementation of the Free Allocation Decision (otherwise known as the Community Implementing Measures (CIMs)) for Phase III that are no longer relevant or operable.
- b. The FAR introduces a requirement for installations to maintain Monitoring Methodology Plans (MMPs). To implement this in domestic legislation we will provide that MMPs will form part of an operator's permit. The regulators will be required to include permit conditions requiring operators to (i) monitor their data in accordance with their MMP and the FAR, (ii) retain records of data in accordance with the FAR, (iii) apply to vary their permits where there will be a significant modification to their MMP and (iv) notify the regulator of non-significant modifications. We intend to apply the penalty for non-compliance with a permit condition to these requirements.
- c. The FAR confers power on Member States to determine applications for free allocation (including determining historical activity levels and preliminary and final annual amounts of free allocation). We intend to empower regulators to receive, process, determine and potentially charge for these applications.
- d. We are required under the FAR to nominate competent authorities for various purposes. We will amend domestic legislation to confirm that the competent authorities for each of the UK territories are the relevant regulators for that territory (i.e. the Environment Agency (EA) for England, Chief Inspector as defined by the PPC regulations for Northern Ireland,⁵⁴ Scottish Environment Protection Agency (SEPA) for Scotland, National Resources Wales (NRW) for Wales and the Secretary of State for BEIS (OPRED) for offshore installations).
- e. FAR provisions on mergers and splits of installations will affect permit transfer and consolidation of permit provisions in the domestic legislation. We will amend these provisions to reflect the requirements of the FAR.
- f. The FAR contains provisions about the cessation of operation of an installation. We will amend the cessation of operation, withholding allowances and permit surrender provisions in our Regulations to deliver the requirements of the FAR and to ensure that there is clarity on the policy and procedure.

273. Anticipated changes to the 2012 GHG Regulations required by the revised MRR and AVR:⁵⁵

- a. We will amend our domestic legislation to refer to the updated MRR and new AVR. We will continue our current approach by implementing and enforcing the requirements on operators through permit conditions and the penalty for non-compliance with a permit condition.

⁵⁴ "Chief inspector" refers to the chief inspector constituted under regulation 8(3) of the Pollution Prevention and Control Regulations (Northern Ireland) 2013

⁵⁵ The first review of these regulations concluded at the end of 2018 (see links below). A further review is planned before the beginning of Phase IV. MRR – https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2018.334.01.0001.01.ENG AVR – https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2018.334.01.0094.01.ENG

- b. We will continue to provide in our domestic legislation that the regulators will be designated as the competent authorities under the MRR and AVR for the same purposes as currently set out in the domestic legislation. In addition, we will authorise the Environment Agency to be the focal point as referred to in Article 70(2) of the AVR. This role relates to receipt of the outcome of peer evaluations of, and the exchange of information and co-operation with, the UK's national accreditation body.

274. Anticipated changes to the 2012 GHG Regulations required by the activity level change provisions, once confirmed and adopted at EU-level:

- a. We will need to amend our domestic legislation to reflect these provisions. At the very least, we will set out the notification requirements on operators (which are likely to be included as permit conditions), give powers to the regulators to withhold allowances in certain circumstances (for instance when operators alert regulators or it is discovered that their activity levels have decreased, allowances may be withheld until the allocation has been adjusted in the Union Registry), adjust allocations, and impose penalties if operators fail to comply with the requirements. We propose to set the penalty for non-compliance with a notification requirement at £5,000. This discretionary penalty will be equivalent to Part 7, Regulation 53(4) in the 2012 GHG Regulations to maintain the status quo. We will also continue to require that, if an operator receives allowances to which it is not entitled, it will be required to return the balance of the over or incorrect allocation.

275. Anticipated changes to the 2012 GHG Regulations required by the revised Registries Regulation:

- a. We will continue to provide in our domestic legislation that the Environment Agency will be designated as the national administrator for the purposes of the Registries Regulation 2019.
- b. To update regulation 80 (and other regulations as necessary) with the correct updated references to the Registries Regulation, ensuring the correct articles are cited.

Consultation Questions	
52	<p>a) Do you agree with the proposed approach to transposition of tertiary legislation outlined in this chapter? (Y/N)</p> <p>b) Please expand on your answer and give evidence where possible.</p>
53	<p>a) Do you agree that the proposed penalty for non-compliance with a notification requirement is appropriate? (Y/N)</p> <p>b) Please expand your answer and give evidence where possible.</p>

C. and D. Areas with Member State discretion where we are proposing changes

A note on nomenclature for Small Emitter Schemes

276. We chose to implement the Article 27 provisions in Phase III as the “UK Small Emitter and Hospitals Opt-Out Scheme”. Throughout the 2012 GHG Regulations installations taking advantage of this opt-out are referred to as “excluded installations”. However, with the introduction of a further class of exempted installations in the Phase IV Article 27a provisions, there is a potential for confusing references to exempted installations under each provision.
277. For this reason, we intend to clarify the references while amending the 2012 GHG Regulations, changing the language to specifically reference either “Article 27” or “Article 27a” installations. We will also be changing the name of the “UK Small Emitter and Hospitals Opt-Out Scheme” to the “UK Article 27 Scheme” for small emitters, to clearly differentiate it from the new “UK Article 27a Scheme” targeting ultra-small emitters. By the same token, the Excluded Installations Emissions Permit (the permit that confirms an installation’s membership of the Article 27 Scheme and sets out the conditions) shall be referred to as an Article 27 permit.
278. We have carried out an impact assessment of the implementation of these two small emitter schemes. This can be found attached to this consultation in the Phase IV Impact Assessment.

C. Article 27 Provisions

279. Article 27 of the ETS Directive provides for exclusion of installations emitting less than 25,000t CO₂eq per year which have a rated thermal input below 35MW where combustion activities are carried out (excluding biomass emissions), and hospitals, from the main EU ETS. These installations instead enter into a simpler scheme, the design of which is determined by the Member State within the framework set by the Directive. These schemes must establish measures to ensure participating installations deliver equivalent emission reductions to the EU ETS, to ensure that the environmental goals of the EU ETS are preserved. The UK offered such a scheme in Phase III, called the “UK Small Emitter and Hospitals Opt-Out Scheme” and we propose to continue to offer this derogation for Phase IV. This is not relevant for aviation.
280. 320 installations (including hospitals) submitted emissions data for Phase III prior to the start of the Phase which indicated their eligibility for the UK’s Small Emitter and Hospitals Opt-Out Scheme. Of these, 243 chose to opt-out. This was out of 1,010 installations in total in the UK at the time, meaning that at launch the UK’s Article 27 Scheme in Phase III covered approximately 24% of all stationary installations. These installations together represented less than 2% of UK installation EU ETS emissions.

Consultation Questions	
54	Are you responding on behalf of an installation that emits less than 25,000 tCO ₂ eq annually and with a combustion threshold less than 35MW, or meets the 2012 GHG Regulations definition of a hospital installation? (Y / N)
55	Are you responding on behalf of an installation that was a member of the UK’s Small Emitter and Hospital opt-out scheme in Phase III? (Y / N)

281. The main cost savings of the UK’s Article 27 Scheme (both for Phase III and Phase IV) are provided through:
- An option for risk-based auditing of emissions instead of third-party verification; participants in the UK’s Article 27 Scheme can opt to self-verify their emissions data and be subject to a risk-based auditing regime conducted by the regulator. This allows scheme participants to forego the annual cost and administrative burden of third-party verification.
 - No requirement to hold an active registry operator holding account; as participants in the UK’s Article 27 Scheme are not required to surrender allowances for compliance, they are spared the expense of having to establish and maintain a registry account.

- c. The avoidance of needing to engage with the carbon market. Instead, UK Article 27 installations are set an emissions target at the beginning of an allocation period. The target decreases annually by the Linear Reduction Factor applied to the EU ETS cap in the main scheme.

282. An installation monitors its emissions and reports them – if they are below its target in a given year then there are no further compliance obligations for that installation in that year. If it exceeds its emissions target in any year, it is required to pay a civil penalty equal to the tCO₂eq over its target multiplied by the carbon price for the relevant year.⁵⁶

Consultation Questions

- 56
- a) Do you agree that these measures, including the risk-based approach to audit and inspection, are appropriate for these emitters? (Y / N)
 - b) Please expand on your answer and give evidence where possible.

283. If in any one year an installation, other than a hospital, exceeds the overall scheme threshold of 25,000t CO₂eq, then they enter the main EU ETS the following year. If they took part in the National Implementation Measures (NIMs) data collection (which is used to calculate Historical Activity Level (HAL), Commission benchmarks and preliminary free allocation for incumbent installations), then at this point they would be eligible to apply for free allocation from the New Entrants Reserve. At time of publication very few such installations across the UK have re-entered the main EU ETS during Phase III.

284. Our data suggest that installations that took advantage of the opt-out scheme for Phase III faced a lower cost of compliance than other installations emitting less than 25,000t CO₂eq per year that chose not to opt-out of the main EU ETS. This evidence is reinforced through the conclusions of the Impact Assessment attached to this consultation.

285. For these reasons, we see value in the scheme and propose to continue to offer it for Phase IV, making some minor changes to introduce new simplifications and reflect changes to the ETS. These minor changes are outlined below.

Consultation Questions

- 57
- a) Do you support the continuation of the UK's Article 27 Scheme for Phase IV? (Y / N)
 - b) Please expand on your answer and give evidence where possible.

⁵⁶ This is published annually by the Secretary of State: <https://www.gov.uk/government/publications/determinations-of-the-eu-ets-carbon-price>

286. The main conditions for eligibility for this scheme are established by the ETS Directive and will not be changing for Phase IV. A non-hospital Article 27 installation is an installation with:
- a. Reported annual emissions less than 25,000t CO₂eq (excluding emissions from biomass) in each of the three years prior to an allocation period's National Implementation Measure (NIMs) data collection;⁵⁷ and
 - b. Where a combustion activity listed in Annex I of the EU ETS Directive is undertaken, a net rated thermal input below 35MW in the same three years, excluding biomass.
287. Hospitals may also opt-out under Article 27 (small emitter). A hospital is an installation that, in a scheme year:
- a. Exports no more than 15% of heat produced by the installation to an establishment other than a hospital; or
 - b. If the installation is not operated by a hospital, supplies no less than 85% of the heat it produces to one or more hospitals.

Proposed changes to the UK's Article 27 Scheme for Phase IV

288. We are only proposing to change minor aspects of the scheme. These are to reflect overall reforms to the ETS Directive, and to introduce some minor new simplifications for both operators and regulators.
289. The process that installations can use to adjust their target to reflect changes in capacity will remain the same.
290. We have covered above the changes to the nomenclature in the 2012 GHG Regulations we are proposing to distinguish this scheme from the new Article 27a Scheme.
291. There will be two allocation periods in Phase IV, 2021-2025 and 2026-2030, with the National Implementation Measures (NIMs) data collection exercises to determine Free Allocation in advance of each allocation period. Consequently, there will be two opportunities for installations to enter the Article 27 Scheme, aligned with each of the NIMs exercises, with deadlines of 30 September 2019 and 30 September 2024 for each period. These are also the deadlines for Member States to notify the Commission of all the installations it intends to exclude under Article 27 and 27a provisions.

⁵⁷ The once-per-allocation-period data collection exercise that is used to establish historical activity levels and set benchmarks for free allocation.

292. Operators will be required to notify regulators of their intent to take advantage of one of these schemes in advance of these deadlines for each allocation period. There will be a deadline to notify the regulator of intention to join the scheme by 30 June 2019 and 30 May 2024, after which we will begin processes to enter the installation onto the Article 27 Scheme.
293. In the case of notification in 2019, operators will also have an opportunity to withdraw their intention of joining a scheme before a final deadline of 31 August 2019. This staggered approach will allow operators to make an informed decision whether to enter the scheme at a point where there is policy certainty.

Consultation Questions

- 58
- a) Do you agree with the proposed deadlines for operators to indicate to regulators their intent to enter the UK's Article 27 Scheme (30 June 2019 and 30 May 2024 notification of intent, 31 August confirmation)? (Y / N)
 - b) Please expand on your answer and give evidence where possible.

294. It is currently possible for installations to roll over unused target amounts from year to year. For example, an installation with an emissions target of 10,000t CO₂eq that only emits 9,000 in a year would be able to roll over 1,000 to use against the following year's target. We intend for this to remain the case in Phase IV.
295. However, some installations (for instance, in years where production fell dramatically but there has been no capacity change) have built up a very large surplus of target which renders their emissions target largely meaningless.
296. For this reason, **we propose** overachievement against an installation's emissions target remains 'bankable' within an allocation period, but not between separate allocation periods. In advance of each new allocation period, following an installation notifying the regulator of its intention to enter the Article 27 scheme, emissions targets will be re-calculated to reflect an installation's activity. Operators that wish to engage more extensively in banking can consider participation in the main EU ETS.

Consultation Question

- 59
- a) Do you agree with the proposed approach to the 'banking' of overachievement against emissions targets? (Y / N)
 - b) Please expand on your answer and give evidence where possible.

297. In Phase III it was possible for operators to choose whether to set their emissions target either by their average emissions over three years prior to the Phase III data collection or based on their projected preliminary allocation. Calculations of draft targets based on projected preliminary free allocation, including the application of benchmarks or fall-back approaches and historic activity levels, were undertaken in accordance with the Community Implementation Measures (CIMs) and associated Commission guidance.
298. A clear majority of operators opted for the average historical emissions methodology, with only 12 operators of the 243 applying to join the scheme choosing the preliminary allocation methodology. As very few operators chose to set their target through the CIMs methodology, we propose not to offer this option for the UK's Article 27 Scheme in Phase IV. This means that operators in the Article 27 Scheme would not need to submit a complete set of NIMs data (some baseline data will still be required in order to assess eligibility), unless they considered they may require free allocation in the subsequent allocation period (e.g. if they thought they may re-enter the main EU ETS mid-allocation period), or if they consider that there is doubt over their eligibility for the Article 27 scheme.
299. We consider this to be a proportionate measure to simplify the Article 27 Scheme with minimal negative impact on operators.

Consultation Question

- 60
- a) Do you agree with the proposal to simplify the scheme, by offering one route to calculating Article 27 emissions targets for Phase IV – i.e. through the historical emissions methodology and not NIMs? (Y / N)
 - b) Please expand on your answer and give evidence where possible.

300. In the 2012 GHG Regulations the penalty for installations exceeding their emissions target (Regulation 55) is treated as a discretionary penalty, meaning that the regulator has discretion over whether to issue the penalty or waive it. The penalty is intended to be a non-punitive measure to recover the cost of excess emissions only. It has always been the case in the course of normal operation in Phase III that the regulator has ultimately chosen to issue the penalty in full. Therefore, this unused discretion has resulted in an unnecessary regulatory burden for regulators and operators, as this creates more regulatory procedures to justify the use of the penalty.
301. As such, we propose to make the penalty for exceeding an emissions target mandatory, removing regulators' discretion, except in the cases where there is an error in the calculation of a target or targets are otherwise incorrect. This will reduce the administrative burden on regulators and operators and distinguish this penalty from the regulators' punitive penalties which are designed to incentivise compliance.

302. In the very rare case where an operator feels that this penalty has been unjustly issued, they would still have the option to appeal the penalty via the procedures set out in the 2012 GHG Regulations. Therefore, this change should serve to reduce the amount of administrative work conducted by operators to respond to discretionary penalties and constitute a significant reduction in administrative burden for regulators. This saving is passed on to the taxpayer as this element of work will no longer need funding (e.g. BEIS currently provide the EA around £100,000 per year to resource this activity in England).

Consultation Question

- 61
- a) Do you agree with the proposal to simplify the scheme, by reducing the discretion for regulators in relation to the 'Regulation 55' penalty (for installations exceeding their emissions target)? (Y / N)
 - b) Please expand on your answer and give evidence where possible.

303. In Phase III any opted-out installation re-entering the main scheme would need to remain in the main scheme until the end of the Phase. For Phase IV, with the introduction of five-year allocation periods, such an installation would be required to remain in the main scheme until the next allocation period, at which point it could re-enter the Article 27 scheme if eligible. Similarly, the opting out of an installation under Article 27 will only be valid for one allocation period, at the end of which existing Article 27 installations will need to submit independently verified data to confirm their eligibility for the opt-out scheme through the relevant NIMs exercise. This will be reflected in UK domestic legislation.

Consultation Questions

- 62
- a) Are there further simplifications that could be made for Phase IV Article 27 Scheme participants, respecting the provisions established by the EU ETS Directive? (Y / N)
 - b) Please expand on your answer and give evidence where possible.

- 63
- Do you have any further general comments on the proposed UK Phase IV Article 27 Scheme not covered by the previous questions?

D. Article 27a Provisions

304. We propose to implement a new provision for Phase IV under Article 27a of the ETS Directive. This new provision offers Member States the option of fully excluding from the EU ETS stationary installations emitting less than 2,500t CO₂eq per year. Other than monitoring their emissions and confirming that they remain beneath this threshold, this provision makes no further demands on these installations, not requiring any equivalent measures to reduce emissions, any verification of or reporting of their emissions, nor payment to emit over a limit.
305. The reasoning behind this derogation is the same as the reasoning behind the Article 27 derogation. These emitters face a disproportionately large cost of compliance compared to much larger emitters, and in the case of these emitters the scale of the disparity is even more pronounced. Given the very low emissions of these installations it was decided through Phase IV negotiations that more simplification was possible and proportionate given their low environmental risk.
306. Some stakeholders or members of the public may be concerned that the removal of these operators from the EU ETS, with no requirement for equivalent emissions reductions, may constitute an undermining of the environmental principles of the ETS. However, our analysis indicates 168 UK operators may be eligible for an Article 27a exclusion, collectively representing less than 0.1% of UK EU ETS emissions. Therefore, we believe this measure would be proportionate and have no significant impact on the UK's greenhouse gas reduction goals.

Consultation Questions

- 64
- a) Do you support the proposed implementation of an Article 27a exemption scheme, as a proportionate measure to simplify the scheme and reduce administrative burdens for installations with very low emissions? (Y / N)
 - b) Please expand on your answer and give evidence where possible.

Eligibility for the Article 27a Scheme

307. The scope of the Article 27a Scheme is set out in the ETS Directive. An Article 27a installation is defined as an installation where reported annual emissions are less than 2,500t CO₂eq in each of the three years preceding a NIMs collection exercise (the two NIMs collection exercises for Phase IV being held in 2019 and 2024). Therefore, the relevant baseline years for the allocation period 2021-2025 are 2016, 2017 and 2018, and the relevant baseline years for the allocation period 2026-2030 are 2021, 2022 and 2023.

Consultation Question

65

Are you responding on behalf of an installation that emitted less than 2,500t CO₂eq annually in the years 2016, 2017 and 2018? (Y / N)

UK implementation of Article 27a Provision

308. Eligible operators who wish to take advantage of Article 27a will be required to fill in their baseline data on the NIMs template, including verified emissions for the relevant three years, and indicate their intention to opt out under Article 27a in the relevant field. For the first allocation period in Phase IV, this will need to be done and returned to the regulator before 30 June 2019. Regulators will contact eligible installations to inform them of this process in advance of this deadline.
309. Should an eligible installation fail to enter their baseline data, indicating a preference for entering the Article 27a Scheme, it will be entered into the EU ETS main system, unless it has otherwise declared its intention to enter the Article 27 Scheme and followed the relevant parallel process. If the installation intends to enter the main scheme and receive free allocation or wishes to be eligible for free allocation should they have to enter the main scheme for whatever reason, then they will also need to submit data in accordance with the Free Allocation Regulation by 30 June 2019.
310. Once eligibility has been confirmed, an Article 27a installation will be required to have in place a monitoring plan (monitoring annually in line with a January-December annual monitoring period), and understand that they are required to continue to monitor their emissions to ensure they do not exceed the overall 2,500t CO₂eq threshold in any one calendar year (including any additional emissions that arise from additional sources or fuel types). As a baseline, regulators will assume an installation will maintain the monitoring plan it applied from the end of Phase III. Should an installation wish to adopt a different monitoring methodology, this will need to be discussed with the regulator, who may charge the operator for the time taken to assess and approve any alternative monitoring plan. Regulators will be empowered to assess and approve these plans, and to charge if necessary for cost recovery.
311. The obligation to monitor is required by the Directive and will be established in our amendments to the 2012 GHG Regulations. It is the responsibility of the installation to report any breach of this emissions threshold to the regulator and apply for the relevant permit; an installation failing to do so will be liable to incur a penalty in line with the existing penalties established in the 2012 GHG Regulations that can be applied to operators conducting an activity covered by the EU ETS Directive without a permit. We consider this proportionate as the aim of these penalties is to charge the operator for all costs avoided by not being subject to the compliance costs of the EU ETS, ensuring that an operator cannot profit through non-compliance.

312. Furthermore, it will be the responsibility of the operator to ensure that the regulator has a valid point of contact for the installation and to inform the regulator of these changes. However, other than these points, there are no further annual reporting requirements made for an Article 27a installation, and they will be exempted from the EU ETS for the duration of that five-year allocation period (as long as their emissions remain beneath the threshold).
313. The exempted installation will be required to re-verify its eligibility for the UK's Article 27a Scheme in advance of each allocation period. For the 2024 data collection exercise, Article 27a operators will be required to submit verified annual emissions data for 2021, 2022 and 2023 in accordance with the Free Allocation Regulation. If as part of this process it is determined that an installation failed to promptly report a breach of the annual limit of 2,500t CO₂eq (within three months of the end of a calendar year) they will be liable to be fined for all emissions for that year and all subsequent years in line with the penalties outlined above.

Consultation Questions

- 66 a) Do you agree with the process outlined for an installation's entry onto the Article 27a scheme? (Y/N)
b) Please expand on your answer and give evidence where possible.
- 67 a) Do you agree with the UK Government's and the Devolved Administrations proposed approach to penalising operators who exceed the emissions threshold and do not report, including the timelines for notification and other administrative issues? (Y / N)
b) Please expand on your answer and give evidence where possible.

Exceeding the 2,500t CO₂eq threshold

314. Once eligibility for the UK's Article 27a Scheme is confirmed by the regulator, an installation will be asked to declare a preference for what happens should they exceed the emissions limit in any given year. They will have a choice between either entering the EU ETS main scheme or entering the UK's Article 27 Scheme in the year following the threshold exceedance. When the UK submits its list of Article 27 and 27a installations to the Commission (by 30 September 2019) it will indicate which Article 27a installations would enter the Article 27 Scheme and which would enter the main system if they exceed the 2,500t CO₂eq threshold.⁵⁸

⁵⁸ To note an installation with emissions < 25,000 tCO₂eq per year but a combined thermal input in excess of 35MW would be ineligible to enter the UK's Article 27 Scheme and would have to enter the main scheme.

315. If an installation chooses to enter the main scheme on exceeding the 2,500t CO₂eq threshold, then the same procedure will be followed as when an Article 27 installation exceeds the 25,000t CO₂eq threshold mid-allocation period.⁵⁹ It is important to note that if an installation had opted not to provide a fully verified baseline data report (including details on sub-installations) as part of the relevant NIMs exercise then they would not be eligible for free allocation for the remainder of that allocation period.
316. If they choose to enter the Article 27 Scheme then their target will be calculated based on the three prior years of verified emissions, which will have to be retroactively verified by an accredited third-party verifier. The operator will bear the cost of this process.
317. In either case the operator will be required to pay for any emissions over the Article 27a threshold emitted during the period between exceeding the threshold and entering either the main scheme or the Article 27 scheme. The penalty will be the EU ETS carbon price (as determined annually by the Secretary of State) for each tCO₂eq over 2,500. This payment will be collected through a civil penalty.

Consultation Questions

- 68 a) Do you agree that operators entering the Article 27a Scheme should declare a preference for what should happen should they exceed the emissions threshold, to enable them to enter the Article 27 Scheme if necessary? (Y / N)
- b) Please expand on your answer and give evidence where possible.

Note on reserve or backup units

318. Article 27a also allows Member States to exclude reserve or backup units from the EU ETS which do not operate more than 300 hours in each of the three years preceding a NIMs exercise. However, we have several concerns with this provision.
319. Firstly, there are practical implementation challenges concerning how this would be monitored and verified. Measures for the robust and reliable monitoring and verification (MRV) of annual emissions are a tried and tested feature of the EU ETS. Operating time is not part of the current EU MRV framework and we would have concerns over how to reliably incorporate this aspect into existing domestic MRV provisions without imposing significant new administrative burdens.
320. Secondly, we can see how in some circumstances the implementation of this measure could lead to a large volume of emissions being removed from the EU ETS. For example:

⁵⁹ Including applying for a permit, agreeing an approved monitoring plan and opening an account in the UK registry.

- a. Individual large and energy intensive backup units can run for less than 300 hours and still generate a high volume of CO₂eq.
- b. An installation could operate several backup units, each operating for less than 300 hours per year, but collectively emitting a large volume of CO₂eq.
- c. The removal of one or more of these units could lower the overall installed capacity of an installation to below 20MW, thereby taking the entire installation (and its emissions) out of the EU ETS.

321. Thirdly, there is no clear definition on exactly what constitutes a 'reserve or backup unit' and attempting to agree one would likely prove controversial.
322. Lastly, we feel that setting a quantifiable de minimis emissions threshold for inclusion in the EU ETS is more in keeping with the overall objectives of the Directive (i.e. a system to monitor and drive reductions in GHG emissions) than setting an operational duration threshold.
323. For these reasons, we do not intend to implement this aspect of the Article 27a provisions for Phase IV.

Consultation Questions

- | | |
|----|---|
| 69 | <ul style="list-style-type: none"> a) Are there further simplifications that could be made for Phase IV Article 27a Scheme participants, respecting the provisions established by the EU ETS Directive? (Y / N) b) Please expand on your answer and give evidence where possible. |
| 70 | <ul style="list-style-type: none"> a) Do you agree with the proposed approach to not implement the Article 27a provision on reserve or backup generators? (Y / N) b) Please expand on your answer and give evidence where possible. |
| 71 | <ul style="list-style-type: none"> a) Assuming you are in scope, would you choose to take advantage of the proposed Article 27a scheme for Phase IV? (Y / N / not in scope) b) Please expand on your answer and give evidence where possible. |
| 72 | <ul style="list-style-type: none"> a) Do you agree to the proposed use of penalties for implementing Article 27a? (Y / N) b) Please expand on your answer and give evidence where possible. |
| 73 | <p>Do you have any general comments on the proposed UK Phase IV Article 27a Scheme, not captured by the previous questions?</p> |

E. Further changes for Phase IV, not mandated by EU legislation

Proposed changes to penalties

324. We propose to amend the existing penalties. Detailed changes and specific justifications are laid out in Annex C. The general rationale for these changes is so that the maximum applicable penalties in these cases remain effective, proportionate and dissuasive when assessed in accordance with the regulators' updated enforcement and sanctions policies (ESP).
325. The 2012 GHG Regulations penalties were last reviewed in 2012. The Environment Agency (EA) published its revised ESP in April 2018, following public consultation. For the majority of penalties, the EA now exercises discretion using a 'stepped approach' based on the Definitive Guideline on the Sentencing of Environmental Offences and adjusted so that they are appropriate for the climate change penalties.
326. When comparing these 'steps' to existing EU ETS penalties applied in the UK throughout Phase III with low statutory maximum amounts, we conclude that certain penalties are too low to be considered dissuasive compared to the seriousness of the breach. In addition, this does not give the regulator the flexibility to adjust penalty amounts based on the seriousness of the breach. For example, in the case of the penalty relating to non-compliance with a permit condition, we do not consider the maximum penalty of £3,750 to offer enough flexibility to distinguish between a relatively minor failure to notify the regulator of a non-significant administrative change, and a much more serious failure to submit a verified annual emissions report.
327. The EA's ESP, with respect to EU ETS, is only applicable in England, with devolved regulators maintaining competence regarding their own ESPs. However, the EA's ESP was developed following discussion with devolved regulators, so divergence is relatively minor.
328. To note that in most cases, the penalties outlined constitute the maximum possible penalty, with regulator discretion being applied in each case to set the level of the penalty. Furthermore, operators retain their right to appeal the application and, in most cases, the level of a penalty.
329. Our analysis of the proposed changes, based on Phase III penalties issued to date across the whole of the UK, indicates that if these penalty changes were applied, they would result in an average total increase per year of approximately £36,000 across all penalties and operators in the UK. Furthermore, based on a sample of all operators in England, less than 1% of UK EU ETS operators have been subject to a penalty covered by these proposed changes between 2013 and 2018.

Consultation Questions

- 74 a) Do you agree with each of the proposed penalty increases outlined in Annex C? (Y / N)
- b) Please expand on your answer, referencing the regulation number(s) of the point(s) in question.

Determination of emissions

330. The 2012 GHG Regulations and the Monitoring and Reporting Regulation currently gives regulators a duty to determine the emissions of an installation or aircraft operator in certain circumstances. This determination is treated as determining all the reportable emissions from the installation or aircraft operator.
331. If the regulator discovers an error in its determination, there is currently no explicit power for it to withdraw the original determination and replace it with a correct one. We propose to amend the 2012 GHG Regulations to make this power explicit. We will also clarify that discretionary penalties due as a result of under-reporting emissions apply regardless of whether an error is in a verified emissions report or a regulator determination.

Appeals relating to additional daily penalties

332. We propose to amend the 2012 GHG Regulations to clarify that, where daily penalties apply under Regulation 50, the initial notice (required so that a daily penalty may start to escalate) is only a procedural step before a Notice of Civil Penalty is issued. There would be no right of appeal against this procedural step. This would constitute a significant reduction of administrative burden on operators, aircraft operators, appeal bodies and regulators, without having any practical impact on the ability of operators and aircraft operators to ultimately appeal the level of penalty once the Notice of Civil Penalty is served.

Returning of allowances received in error

333. We propose to amend the current legislation to make it compulsory for operators that have ceased operations and received free allowances in error, to return these allowances instead of surrendering them.⁶⁰ This will ensure allowances can be re-allocated appropriately to other installations rather than cancelled.

⁶⁰ Surrendered allowances are cancelled, whereas returned allowances can be to the free allocation pot and be allocated to other installations entitled to free allocation.

334. Furthermore, the 2012 GHG Regulations do not currently reflect the way that the Union Registry provides for allowances to be returned. We propose to rectify this to remove any confusion. We propose that the registry administrator may notify the account holder that it must return the allowances by a specified date or may, on instruction from the relevant regulator and after notifying the operator concerning the date at which this will take place, carry out the return itself. If the registry administrator is carrying out the return it is the responsibility of the account holders to ensure they have enough allowances in their Registry account to enable the return to happen. Operators and aircraft operators that do not make enough allowances available would be liable to a penalty under Regulation 67. This amendment would provide clarity about the process needed to return allowances and allow the regulator to facilitate the return of the allowances with the minimum amount of administrative burden for all concerned.

Power to withhold allowances following changes to the carbon leakage list

335. We propose to amend the legislation to empower regulators to, following the removal of an operator from the carbon leakage list, withhold any free allocation to which it is no longer entitled. The current legislation requires the regulator to issue the allowances and then serve a notice for their return, which represents an unnecessary administrative burden. Furthermore, the return/recovery process for these allowances can be very complex in cases where the installation has subsequently ceased operations. This amendment would serve to make the UK implementation of the EU ETS more cost-effective and less time-consuming for regulators and operators.

Surrender of allowances following transfer of permit

336. We propose to amend legislation to clarify that when a GHG permit has been transferred between operators and an error is subsequently discovered in an emissions report of the previous operator, then the previous operator should transfer all required allowances (either from an account it holds or from a trader) into the new operator's Registry account as soon as possible after the error is discovered. The new operator then must surrender them within one month of receiving the allowances.
337. To enforce this procedure, we propose to extend the €20 per allowance penalty so that it may apply to a previous operator who fails to transfer the allowances to the new operator, or to a new operator that fails to surrender these allowances if the transfer has taken place. Under the current regulations, the regulators cannot require either the old or new operators to surrender allowances to cover previously under-reported emissions. This will close a loophole in current regulations and ensure that allowances are surrendered or paid for by the party that under-reported, respecting the 'polluter pays' principle.

Additional powers to recover unpaid penalties

338. We are considering amending legislation to provide regulators with the same powers for penalties as they currently have for fees (Regulation 82) to assist with debt collection. This will provide a further option for recovering unpaid penalties, which can be complex, particularly where the debtor is based outside a regulator's jurisdiction. We would value stakeholder views on any possible unforeseen impacts of implementing this change.

Eurocontrol data errors

339. We propose to amend legislation to make it clear that emissions reported using Eurocontrol data (which can be done under Article 28a) are regarded as verified emissions. This therefore means that all provisions relating to verified emissions apply to these emissions. The amendments to the legislation will make it clear that: regulators have the power to re-determine emissions if the Eurocontrol data is updated; an Aircraft Operator (AO) is obliged to correct errors in its report in these cases (to be verified if required); and an AO should surrender allowances to cover any deficit determined as a result.
340. The amendments ensure that errors in Eurocontrol data which are later corrected do not result in emissions being unaccounted for in the EU ETS.

Payment of penalties directly to the relevant authority

341. We propose to amend legislation to state that any civil penalties imposed on an operator or aircraft operator during Phase IV of the EU ETS will be paid directly to the relevant authority⁶¹ and not the regulator. The current payment process serves to increase potential error and adds considerable administrative burden because payment must go to the regulator who then transfers the payment over to the relevant authority.
342. This will reflect the approach taken regarding payments on other government schemes and will not affect the regulator's ability to collect penalties and implement debt recovery.

Suitability for new account holders in the Registry

343. We propose to amend Regulation 80(15) to make it clear that when account holders or authorised representatives wish to become users of the Registry, the burden of proof to demonstrate that they are 'a fit and proper person' lies with the applicant. The registry administrator can then decide whether to approve a person based on the evidence provided. This would help to protect the Registry from criminal activity.

⁶¹ Scottish Ministers in Scotland, Welsh Ministers in Wales, the Northern Ireland Executive in Northern Ireland and BEIS for offshore installations and in England.

Regulatory Responsibility for Carbon Capture and Storage

344. We propose to amend the legislation to add the clarification that BEIS-OPRED can be directed by the Secretary of State as the appropriate EU ETS regulator for CCS pipelines located in England which are partially onshore and partially offshore. This would cover CO₂ within the pipeline from the last point of measurement onshore to the offshore storage area. The Secretary of State may also seek consent of the relevant authority in other UK regions (Scottish Ministers in Scotland, Welsh Ministers in Wales and the Northern Ireland Executive) to direct BEIS-OPRED as the appropriate EU ETS regulator for CCS pipelines in their respective territories.
345. This amendment is proposed to add clarity for installations that have pipelines that are used to transport CO₂ for the purpose of carbon capture and storage which extend from the capture plant onshore to the offshore storage area. This makes it clearer for the regulators that BEIS-OPRED is the regulator responsible for the transport of the CO₂ from the last point of measurement onshore. This may include pipeline installation, maintenance and any decommissioning aspects of the onshore section.

Application of the Excess Emissions Penalty

346. We propose to amend the legislation to make it clear that the Excess Emissions Penalty, which applies to operators and aircraft operators who have not surrendered sufficient allowances, is calculated only by reference to the emissions in the scheme years in which breaches have occurred. Payment of the Excess Emissions Penalty does not release an operator/AO from its obligation to surrender allowances equal to any deficit arising from previous scheme years. However, we do not consider that operators or aircraft operators should be liable for an Excess Emissions Penalty in respect of any allowance deficit carried forward from a previous scheme year.⁶²

Consultation Questions

- 75 a) Do you agree with the proposed changes outlined in this section? (Y / N)
b) Please expand on your answer referencing the paragraph number(s) of the point(s) in question.

⁶² For example, if an operator or aircraft operator fails to surrender allowances for a given scheme year they will be liable to the Excess Emissions Penalty for emissions produced in that scheme year only. For year X, it would be €100 x year X emissions, for year Y, €100 x Y emissions etc. Operators would **not** be subjected again to the Excess Emissions Penalty for emissions from previous scheme years in respect of which allowances have still not been surrendered.

Article 13 of the Monitoring and Reporting Regulation

347. Article 13 of the MRR states that Member States may publish simplified monitoring plans. The UK did not implement these provisions in Phase III as there were not sufficient guidelines to set out what would constitute such a monitoring plan. However, the Commission recently issued a Guidance Document⁶³ detailing some examples.
348. We are therefore considering the potential benefits of implementing this for Phase IV and would appreciate stakeholder feedback on this point. The approach we are currently considering is to work with industry at a sector level to establish sector-specific standardised monitoring plan templates. Once the monitoring plan templates are agreed with the regulators and subsequently published, operators would then easily be able to use the templates, subject to a risk assessment by the regulators.

Consultation Questions

- 76 a) Do you think the implementation of Article 13 would be beneficial? (Y / N)
b) If implementing this derogation, what should be the UK's priorities, and what would you like to see from such a measure? What are the possible risks that you can identify from undertaking this approach?
- 77 a) Would you be happy to work with government and regulators to further explore these options on Article 13 of the MRR in advance of Phase IV? (Y / N)
b) Please expand on your answer and give evidence where possible.
- 78 Do you have any further comments or questions on the content of this consultation chapter?
- 79 Does your interest in the ETS relate to the operation of the scheme in a particular geographical area?
a) England
b) Wales
c) Scotland
d) Northern Ireland
e) UK-wide

⁶³ https://ec.europa.eu/clima/sites/clima/files/simplified_monitoring_plan_exemple_en.pdf

Annexes

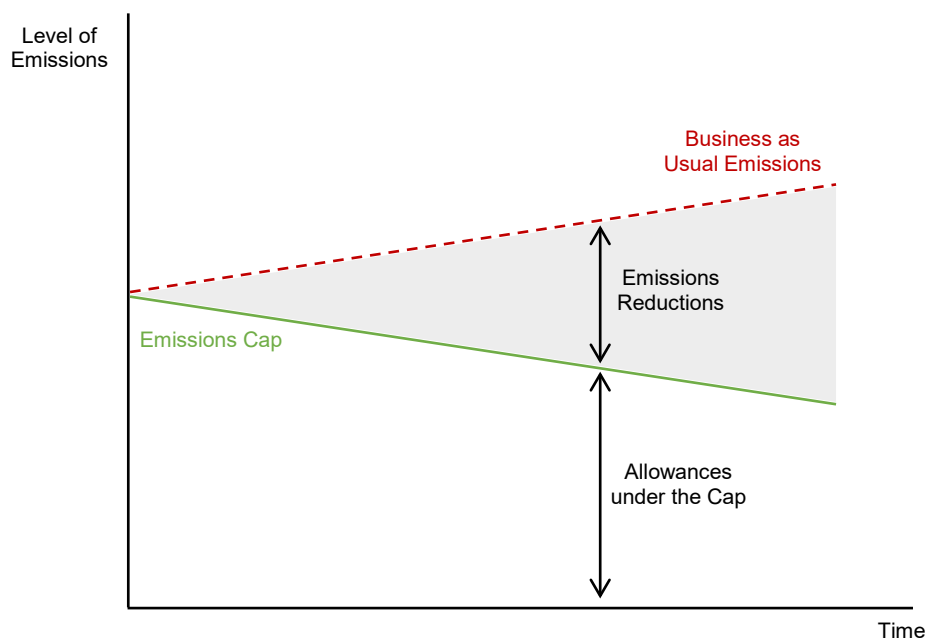
Annex A – UK ETS Appraisal

1. This annex appraises the proposals for the design of a linked and standalone UK ETS, against a counterfactual in which the UK continued to participate in Phase IV of the EU ETS. The appraisal first considers the impacts of the key design features of the UK ETS on system participants, and subsequently considers the net societal costs and benefits and economic transfers associated with a UK ETS relative to the counterfactual.
2. This annex does not assess proposals set out in the main document with respect to UK transposition of Phase IV into national law (should the UK remain a member of the EU ETS beyond 2020). These proposals are set out in the Phase IV Impact Assessment that is published alongside this consultation document.

Background on the EU ETS

3. The EU ETS works on the principles of cap-and-trade (see Figure 1 below for illustration). A cap is set on the total quantity of emissions permitted in the system, which is reduced over time to meet the EU's long-term emissions reduction targets for the sectors within the scope of the system.

Figure 1. Diagram to illustrate emissions reductions under a cap and trade system⁶⁴



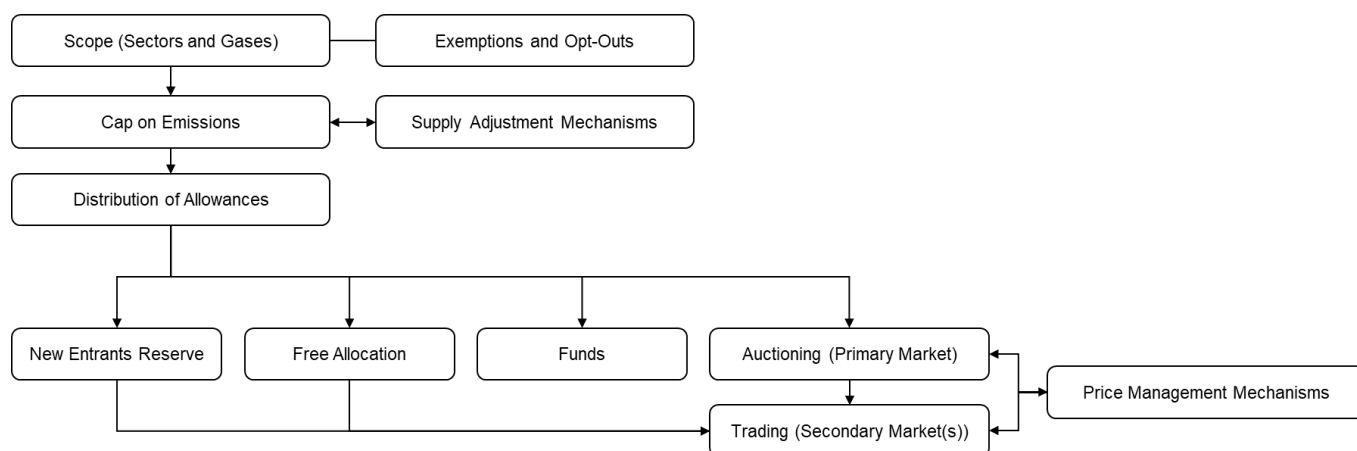
4. As shown in Figure 2 below, once the cap on emissions is determined, allowances are then distributed to system participants primarily via free allocation or auctioning – where

⁶⁴ Where business as usual emissions represent expected emissions in the absence of a carbon pricing policy.

each allowance under the cap represents a permit to emit one tonne of CO₂ equivalent (CO₂eq).⁶⁵ The system then provides flexibility over how and when installations / operators within scope reduce emissions to meet the annual cap through the trading of allowances on secondary markets.

5. The allowance prices that result from trading between market participants create the incentive to reduce emissions: installations / operators whose cost of abatement is lower than the purchase price of allowances are incentivised to abate (and can benefit by selling any surplus allowances to the market) while installations / operators whose cost of abatement is higher than the prevailing allowance price can buy allowances on the market to meet their compliance obligations. In this way, the ETS ensures emissions reductions occur when and where it is most cost-effective.

Figure 2. Key Design Features of the EU ETS⁶⁶



Description of Scenarios Appraised

6. This annex presents an appraisal of the expected impacts associated with establishing a UK ETS that is either linked with the EU ETS or standalone.
7. As the UK represents around 10% of EU emissions, we have first considered whether the UK market is sufficiently large to be effective as a standalone system. We conclude that we are confident it is, provided it is designed appropriately (see Box 1 below for further details).

Box 1. Effectiveness of a standalone UK ETS

We define the effectiveness of an ETS as active market participation (i.e. active trading of allowances between system participants to facilitate price discovery) and in turn, economically efficient decarbonisation. In assessing the effectiveness of a standalone UK ETS, we have considered a number of features that when taken together could be indicators of effectiveness. These are as follows:

System size

A standalone UK ETS is estimated to cover around 140Mt CO₂eq and up to around 800 installations.⁶⁷ Other active trading systems globally such as California-Quebec, New Zealand, the Regional Greenhouse Gas

⁶⁵ This allows for like-for-like measurement of the global warming potential of the various greenhouse gases covered in the system.

⁶⁶ Note: this diagram is intended to illustrate key design features and does not capture all features integral to the functioning of the EU ETS e.g. the design of necessary administrative processes such as the monitoring, reporting, and verification of emissions.

⁶⁷ Based on 2017 UK installation and emissions data from the Union Registry.

Initiative (RGGI) and Switzerland vary in size – ranging from ~50 to ~690Mt CO₂eq in emissions coverage and ~50 to ~2,350 installations / operators.⁶⁸ This suggests that size alone is not a determinant of an effective system.

We expect a UK system to be comparable in number of installations / operators to the California-Quebec system (which covers ~650 participants) and cover more emissions than the New Zealand system (which covers ~80Mt CO₂eq). Whilst it is not possible to compare these systems directly given differences in their other design features, the expected size of a UK ETS appears to be sufficient for it to be effective.

Volume of trading

Within the EU ETS, the UK accounts for a significant number of allowances traded. Approximately one third of trades between May 2012 and April 2014 involved a UK party (~35,600 trades and 5.7 billion allowances).⁶⁹ If the system is designed appropriately and there are benefits to trading (see section below), the evidence suggests there could be a significant, and sufficient, volume of trading in a UK ETS for the system to be effective.

Market power

We expect a standalone UK ETS to be more concentrated than the EU ETS, with individual participants possessing higher market shares given the smaller market size. A commonly accepted measure of the concentration of firms in a market is the Herfindahl-Hirschman Index (HHI). As a rule of thumb, a result of less than 1,000 suggests a market is not concentrated; between 1,000 and 2,000 suggests some level of concentration. If the index exceeds 2,000 typically this indicates a high degree of concentration and enhanced market power. Calculating the HHI for the EU ETS (under its current scope, including the UK) results in an index of around 30. For a standalone UK system with the scope set out here, we estimate the HHI to be less than 200. This suggests that a standalone UK ETS would have a relatively low concentration of market power and therefore low risk of any one market participant influencing market outcomes disproportionately.

Allowance scarcity

Scarcity of allowances in an ETS can incentivise trading among scheme participants; the greater the scarcity of allowances the greater their value and in turn the greater the gains from trade. Allowance scarcity in the market depends on the level of the system cap on emissions and can be influenced, for instance, by deployment of supply adjustment mechanisms or wider economic conditions. These features of an ETS are dependent on appropriate scheme design, and we are confident based on the proposals set out in this consultation that the UK ETS is being designed with this in mind.

Benefits of trading

Benefits from trading can arise in an ETS when abatement costs vary between businesses, meaning that allowances can be traded in a way that ensures abatement is carried out where it is cheapest. An initial review of available evidence of abatement costs over the 2020s suggests that the UK sectoral variation in abatement costs resembles the variation seen in the EU ETS as a whole. Both systems have significant low-cost abatement potential in the power sector and some clustering of higher costs for the remaining sectors in scope. Available evidence on the marginal abatement costs of these non-power sectors suggests there is still sufficient variation to indicate trading could be beneficial in a UK system and thus allow for a UK ETS secondary market to develop.

In designing a UK ETS, we are keen to take into account the experiences of other systems around the world, including our experience of the EU ETS where the UK has been an active participant and proponent of enhancements to the scheme over the various phases. Overall, we conclude that a UK system should be sufficiently large to be effective and will have adequate allowance scarcity given the proposed system design.

8. The following sections outline in more detail the UK ETS scenarios we appraise, including the counterfactual against which we compare them to understand their likely impacts.

⁶⁸ Years represented by the data vary from 2014 to 2018. See <https://icapcarbonaction.com/en/ets-map> for more information.

⁶⁹ Based on analysis of the EU Transaction Log (note: detailed transaction data is made available with a three-year lag): <http://ec.europa.eu/environment/ets/transaction.do>

Counterfactual – Do Nothing

9. In the 'do nothing' scenario where the UK has left the EU ETS, UK electricity generators, energy-intensive industries and aircraft operators would no longer be subject to the EU ETS carbon price.
10. Without a replacement to the EU ETS, these installations / operators would face only the remaining mix of domestic climate policies targeting their energy use and greenhouse gas emissions. These policy measures are summarised in Table 1 below:

Table 1. The main climate policies that would continue to apply in the 'do nothing' scenario

Policy	Description
Carbon Price Support (CPS)	<p>The CPS is a tax paid by UK electricity producers on fossil fuels used to generate electricity, charged through a component of the Climate Change Levy (see below). The CPS was established to 'top-up' the EU ETS allowance price and target a Total Carbon Price (TCP) that would ensure reductions in unabated coal generation (and associated emissions) and encourage investment in low carbon technologies.</p> <p>The CPS is currently frozen at £18/tCO₂eq until 2020-21. The tax rate that would apply beyond 2020-21 is not yet determined.</p>
Climate Change Levy (CCL)/Climate Change Agreements (CCAs)	<p>The main rates of the CCL are paid by large energy intensive businesses (non-domestic) on their supply of electricity, gas and solid fuels such as coal or lignite. The CCL was established to incentivise energy efficiency and encourage emissions reductions. The tax rate varies by 'commodity' and the main rates are currently set to 2021-22.⁷⁰</p> <p>It is worth noting that industry operators who hold a Climate Change Agreement (voluntary agreements to reduce energy use and emissions against agreed targets) receive a CCL discount. This discount is equal to a 90% reduction on electricity bills, and a 65% reduction on gas and other fuels. The current CCA scheme is set to run until the end of March 2023.</p>
Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA)	<p>CORSIA is a market-based measure designed to encourage airlines and aircraft operators to reduce and counteract their CO₂ emissions from international flights. The UK has signed up to adopt CORSIA from its pilot phase (starting in 2021) onwards.</p> <p>Unlike the EU ETS, aircraft operators under CORSIA are required to purchase 'credits' from other industries and projects that demonstrably limit emissions to offset their own growth in emissions relative to a baseline level in 2020. In its current scope CORSIA also does not cover domestic aviation.</p>

11. In the absence of a replacement to the EU ETS in the UK it is likely that the mix of policies set out above, given their current scope, will be insufficient to maintain the ability to meet our legal obligations under the Climate Change Act. Given this scenario is unlikely to meet the main policy objectives, we do not consider it further.

Counterfactual – UK in the EU ETS

12. The counterfactual against which we have considered a UK ETS represents continued UK participation in the EU ETS. In this scenario, the UK remains within the EU ETS following the end of Phase III, in Phase IV of the system – from 2021 to 2030 (inclusive). This

⁷⁰ For more information see: <https://www.gov.uk/government/publications/budget-2018-overview-of-tax-legislation-and-rates-outlar>

includes continued participation in the aviation EU ETS, which we assume will operate in its current scope in Phase IV of the EU ETS (see section below).

13. This counterfactual represents the current acquis and would likely have remained the main emissions reduction policy covering the traded sector had the UK not voted to leave the EU. For this reason, we have determined this to be the most appropriate benchmark for comparison against proposals for a UK ETS.
14. The following sections summarise what we assume about the EU ETS Phase IV design in comparing it against the UK ETS scenarios considered, taking the main design features set out in Figure 2 above in turn. As far as possible, the following sections reflect our best knowledge of how Phase IV of the system will operate and the UK's role within this.

Scope

15. The starting point for any ETS is determining the sectors and gases to which the policy will apply. As set out earlier in the main document, Phase IV of the EU ETS will include greenhouse gas emissions for stationary installations in the power sector (combustion of fossil fuels) and energy intensive industries such as the production of steel and cement within scope.⁷¹
16. The aviation sector has also been part of the EU ETS since 2012. When aviation was introduced to the EU ETS, it was intended to cover all flights arriving and departing in the EEA. However, following international opposition, the scope of the scheme was revised in 2013 to cover flights within the EEA area only.
17. We assume this scope continues into Phase IV of the EU ETS whilst noting there is uncertainty beyond 2023 in respect of international flights. This is due to uncertainty around, and without prejudice to, how the aviation system may change following i) the European Commission's review of the amendment to reduce the scope of the system from full scope to intra-EEA scope;⁷² and ii) the implementation of CORSIA on international flights alongside the EU ETS from 2021 and how the two systems will interact.⁷³

Cap on Emissions

18. In Phase IV of the EU ETS, the level of the stationary cap set at the beginning of Phase III will continue to reduce by a linear reduction factor (LRF) per annum to drive emissions reductions in line with EU-wide decarbonisation targets.⁷⁴ From 2021 to 2030, this LRF will increase from 1.74% to 2.2% (of the 2010 baseline cap level).
19. The aviation cap was originally set at 97% of the average annual level of emissions in the years 2004-2006, dropping to 95% in 2013. This aviation cap has remained constant at around 38Mt CO₂eq since 2013 but is due to start reducing in line with the EU ETS LRF of 2.2% at the start of Phase IV (2021 onwards).⁷⁵
20. Whilst the total cap on emissions in the EU ETS is set top-down at the EU level rather than individually for each Member State, it is possible to estimate a notional cap for each Member State based their share of allowances in the system. We such an estimate for the UK to appraise the likely impacts of the counterfactual on UK society.

⁷¹ See Annex I and II of the EU ETS Directive: <https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32003L0087&from=EN>

⁷² The European Commission is required to review the Directive within 12 months of the implementation of CORSIA (expected beginning of 2021): https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/685816/Aviation_EU_ETS_-_Final_Stage_Impact_Assessment.pdf

⁷³ More information on the aviation EU ETS can be found here: https://ec.europa.eu/clima/policies/ets/allowances/aviation_en

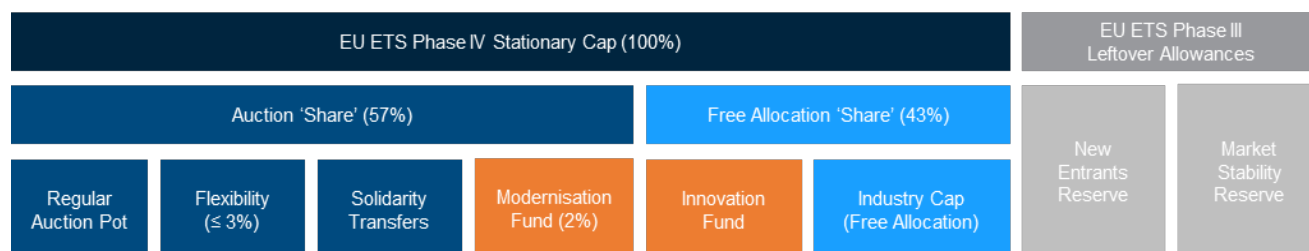
⁷⁴ See https://ec.europa.eu/clima/policies/ets/cap_en

⁷⁵ See https://ec.europa.eu/clima/policies/ets/cap_en

Distribution of Allowances

21. In the EU ETS, allowances under the stationary cap are allocated either via auctioning or via free allocation, except for those that are ring-fenced for the Innovation and Modernisation funds. A key principle of Phase IV of the EU ETS is that auctioning should be the main mechanism for allocating allowances and that over time the scheme should transition towards an increasing number of allowances under the cap being auctioned.⁷⁶
22. In Phase IV of the EU ETS, the stationary cap is split as follows:

Figure 3. Distribution of allowances under the stationary cap in Phase IV of the EU ETS



23. We assume the UK's share of stationary allowances to be around 10% of the total number of auctioned allowances in Phase IV, and 8% of the EU ETS industry cap (the total number of freely allocated allowances) in Phase IV. The latter is an estimate based on available data from Phase III and is subject to relatively more uncertainty as i) some of the Phase IV amendments to the Phase III free allocation rules are yet to be finalised and announced; and ii) the data required for updating the sector-specific efficiency benchmarks and determining free allocation to installations in Phase IV has not yet been collected.
24. We assume the UK's share of aviation allowances to be around 15% of the total number of auctioned aviation allowances in Phase IV as determined by the European Commission. The UK's share of freely allocated allowances is then assumed to reflect free allocation in respect of operators flying on UK routes. We assume that the distribution of allowances to aircraft operators under the aviation cap in Phase IV of the EU ETS remains unchanged, though note the uncertainty around the inclusion of international aviation post 2023 (please see paragraph 17 of this annex).
25. Lastly, we assume no distinction between allowances under the stationary cap and those under the aviation cap from 2021 onwards (consistent with the recent amendments to the EU ETS Directive).⁷⁷ On the basis that stationary and aviation allowances are fully fungible, we therefore assume no difference in value between the two.

Exemptions and Opt-Outs

26. As set out in Chapter 4, Phase IV of the EU ETS allows Member States to offer a "Small Emitter and Hospitals Opt-Out Scheme", to ensure that the administrative costs faced by small emitters and hospitals under the EU ETS are not disproportionate to their emissions and thermal input.
27. For Phase IV of the EU ETS (2021-2030), there is also a new, additional, optional exemption from the EU ETS for ultra-small emitters (installations emitting below 2,500t CO₂eq per year).
28. In the counterfactual scenario, we assume that the UK continues to implement both a small emitters and ultra-small emitters opt-out scheme for stationary sectors. For more detail,

⁷⁶ For more information see: https://ec.europa.eu/clima/policies/ets/revision_en

⁷⁷ <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32017R2392&from=EN>

and the impacts relative to current arrangements under Phase III, please consult the Phase IV Impact Assessment.

29. Similar arrangements exist to reduce the administrative burdens faced by small and non-commercial aircraft operators, as described in paragraph 231 of the main document.

Linked UK ETS

30. In the main document, the UK Government and the Devolved Administrations set out proposals for the design of a UK ETS to be linked with the EU ETS. This UK ETS design largely mirrors the Phase IV EU ETS design to aid delivery, facilitate a linking agreement, and ensure a smooth transition from existing arrangements for businesses within scope.
31. The following section sets out what we expect the impact of this linked UK ETS design to be on UK participants against the counterfactual of the UK remaining in Phase IV of the EU ETS.

Scope

32. As set out on page 32, we propose that a UK ETS will align with the EU ETS in terms of sectors and greenhouse gases within scope; and for aviation that the preferred geographic scope of the system covers both domestic flights and departing flights from the UK to the European Economic Area (EEA) and Switzerland.
33. As a result, we expect the same number of participants to fall within scope of the linked UK ETS as we do for Phase IV of the EU ETS and therefore no impact relative to the counterfactual of this design element.

Cap on Emissions

34. The level of the cap in a linked UK ETS will be subject to negotiation with the EU and will need to reflect appropriately ambition across both systems and the overall integrity of the linked system. When setting the UK ETS cap in a linked system we will also need to take into consideration independent advice from the Committee on Climate Change (CCC), as legally required under the Climate Change Act, and stakeholder responses to the consultation.
35. If a linked UK ETS cap were to result in the same level of ambition across the EU as the EU ETS Phase IV cap (inclusive of the UK), then with full fungibility of allowances between the linked UK and EU system we expect similar carbon prices (compared to the counterfactual) to result.
36. On the assumption that a linked UK ETS results in the same carbon price as would exist in Phase IV of the EU ETS we therefore expect in turn the same level of UK abatement in the linked system compared to the counterfactual.
37. It is worth noting that we expect there to be a benefit to the UK of being able to access a larger carbon market, based on greater differentiation in abatement opportunities (and associated costs) expected in a larger system.
38. Where abatement opportunities are cheaper outside of the UK, the UK can benefit from being able to purchase allowances at a lower price than would otherwise be available in the UK alone. Where abatement is more expensive outside the UK, the UK can benefit by abating and selling unused allowances to other participants outside of the UK at a higher carbon price. The greater the differentiation in abatement opportunities and costs, the greater the potential benefit.

Distribution of Allowances

39. The approach to determining the stationary and aviation cap splits in a UK ETS has been to mirror the EU ETS approach as far as possible, acknowledging that some aspects of this (shown in Figure 3) are not directly applicable or replicable in a UK context.
40. We also propose mirroring the methodology for determining free allocation to stationary installations and aircraft operators in a linked UK ETS – including use of the same datasets in calculating free allocation (e.g. EU ETS Phase IV benchmarks and carbon leakage list,⁷⁸ the EU ETS aviation benchmark⁷⁹ and operator tkm data).
41. As a result, we expect the level of free allocation to UK industry and aircraft operators to be the same in a linked UK ETS as in the counterfactual of continued UK participation in Phase IV of the EU ETS.
42. It is worth noting the following key uncertainties:
 - a. The outcome of negotiations and consideration of the CCC's advice: The design of a linked UK ETS is ultimately subject to negotiation with the EU, which may have implications for some of the design features proposed by the UK. Within the context of ensuring the UK achieves its carbon budgets, the CCC may also advise changes to the proposed linked (and standalone) UK ETS design which we are required to consider.
 - b. Decision on how a UK ETS fund will be sourced: If a fund for industrial decarbonisation is created from revenue raised via the sale of allowances in a UK ETS, this would also have implications for the split of allowances between the different pots - as set out in Chapter 1 - for a given cap level.
 - c. Participant demand for NER allowances: The EU ETS Phase IV NER rules introduce provisions for in-phase adjustments in stationary installations' allocation in response to significant production changes (above/below certain thresholds), which we propose to mirror in a UK ETS. However, there is uncertainty over how this will impact participant demand for allowances from the NER and therefore the appropriate size of this pot.

Exemptions and Opt-Outs

43. Mirroring the same opt-outs and exemptions that exist in Phase IV of the EU ETS for both stationary installations and aircraft operators will ensure that UK participants in a linked UK ETS will not be at a competitive disadvantage compared to their EU counterparts as they will continue to have the same opportunities to opt for a simplified arrangement. We therefore do not expect any additional impact in a linked UK ETS compared to the counterfactual in respect of this design feature.

Standalone UK ETS

44. As far as possible our approach to designing a standalone UK ETS has been to mirror our approach to designing a linked UK ETS. However, we may expect the impacts of a standalone UK ETS to differ from those of a linked UK ETS relative to the counterfactual for the following reasons:
 - a. Some design features may differ from the linked UK ETS design; and

⁷⁸ See https://ec.europa.eu/clima/policies/ets/allowances/leakage_en

⁷⁹ See https://ec.europa.eu/clima/policies/ets/allowances/aviation_en

- b. The size and dynamics of a standalone market will likely differ from those of a linked system.
- 45. The following section summarises areas where the design of a standalone UK ETS could differ from a linked system, and the potential impact of these design elements on UK ETS participants compared to the counterfactual of continued UK participation in Phase IV.

Cap on Emissions and Market Stability

- 46. In a standalone UK ETS there is a question over where the level of the cap on emissions should be set to meet our policy objectives in the context of a smaller market.
- 47. One approach to setting the cap in a standalone UK ETS could be to take the UK's notional share of the EU ETS Phase IV cap. However, there is a possibility that the level of business as usual emissions (BAU) fall under this cap level in some or all years of a standalone UK ETS, which may result in limited demand for allowances.
- 48. An oversupply of allowances relative to UK participant demand for those allowances could result in low carbon prices and therefore reduced incentives for participants to invest in abatement technologies and permanently reduce their emissions. This could also result in lower UK emissions reductions in a standalone UK ETS compared to what would be delivered in the UK in the counterfactual.
- 49. To be at least as ambitious in a standalone UK ETS as with UK participation in the EU ETS over Phase IV, it may be desirable to set a cap that is tighter than our notional share of the EU ETS Phase IV cap.
- 50. To the extent that a tighter cap results in significantly more abatement effort required by participants in the standalone UK ETS (determined by the level of business as usual emissions relative to this cap), we might expect greater emissions reductions achieved in the UK relative to the counterfactual.
- 51. There are also other implications associated with setting a tighter cap on emissions that need to be considered. In particular, the tighter the cap (all else constant) the greater the scarcity of allowances in the ETS and the higher the resulting carbon price. Very high carbon prices may impose significantly higher carbon costs to UK participants (who continue to purchase allowances rather than invest in abatement) compared to the counterfactual and may impact their competitiveness in the primary markets in which they participate (described in more detail later in this annex).
- 52. The extent to which such an outcome may materialise depends on a number of factors such as wider economic conditions, other policies in effect, technological developments and strategic market behaviour by system participants (e.g. banking and borrowing of allowances).
- 53. Proposals for a rules-based Supply Adjustment Mechanism (SAM), an Auction Reserve Price (ARP) and a Cost Containment Mechanism (CCM) are intended to provide stability to the market by alleviating the outcomes driven by extreme price movements or allowance supply issues, as well as ensure a smooth transition for businesses moving from the EU ETS to a UK system.

Exemptions and Opt-Outs

- 54. In a standalone UK ETS, the proposal to mirror the Phase IV exemptions and opt-out provisions for stationary emitters suggests that there will be no impact relative to the counterfactual.

55. With respect to aviation in a standalone UK ETS, the proposal is to set thresholds for exemption and simplified reporting which i) capture a similar proportion of emissions as currently captured under the EU ETS and ii) avoid placing obligations on operators with very few flights from the UK. This will ensure the environmental ambition of the system is not negatively affected relative to the counterfactual, and that the burden on aircraft operators will remain proportional to their emissions within scope of the system.

Societal Impacts of the Policy Options

56. This section summarises the potential costs and benefits to society associated with the different UK ETS scenarios described above compared to the counterfactual of continued UK participation in Phase IV of the EU ETS. Specifically, in the following section we consider the impacts of:
- a. A linked UK ETS (where we assume total ambition across the EU equal to the Phase IV cap);
 - b. A standalone UK ETS with a cap set around the UK's notional share of Phase IV;
 - c. A standalone UK ETS with a relatively tighter cap.

Net Societal Costs and Benefits

Carbon Benefit to Society

57. The primary benefit of an ETS is the benefit to society of emissions reductions (abatement) that are achieved as a result of the policy.
58. Relative to the counterfactual we expect a similar carbon benefit in a linked UK ETS. This is because we assume that similar carbon prices will prevail in the system, and therefore a similar level of abatement is incentivised and undertaken in the UK.
59. With respect to a standalone UK ETS the extent to which the carbon benefit is higher or lower relative to the counterfactual depends on how much effort is required in the system. A tighter cap that results in higher carbon prices relative to the counterfactual is likely to result in a larger carbon benefit to society as more abatement is undertaken.

Resource Costs to System Participants

60. The most significant cost in the policy scenarios considered is likely to be the resource cost to participants associated with reducing their emissions.
61. While the ETS provides system participants with flexibility over how and when they reduce their emissions, it is expected that some level of permanent abatement will take place (i.e. deployment of low-carbon technologies rather than simply reducing production). This abatement is expected to occur to the extent that the cost is less than or equal to the price of carbon in the system – where the cost of abatement is greater than the carbon price, it is more cost-effective for system participants to purchase allowances to cover their emissions rather than abate.
62. As above, we therefore conclude that in a linked UK ETS (where we expect a similar carbon price and level of UK abatement) the resource cost to system participants is likely to be the same as in the counterfactual.

63. In comparison, the extent to which the resource cost to participants is higher or lower in a standalone UK ETS relative to the counterfactual depends on how much effort is required in the system. A tighter cap that results in higher carbon prices and more abatement is likely to result in a greater resource cost to society compared to the counterfactual.

Administrative Costs to System Participants

64. Administrative costs to system participants are the costs incurred from complying with scheme obligations. Compliance includes all necessary activities and fees met by stationary installations and aircraft operators (other than purchasing allowances) such as the monitoring, reporting and verification of emissions and the administration associated with the process of surrendering allowances each year.
65. Relative to the counterfactual we expect administrative costs to participants to be slightly higher in both a linked and standalone UK ETS scenario as a result of the costs associated with, for instance, familiarisation and registration of new accounts in the system (such as the UK registry). We do not expect these costs to arise in the counterfactual moving from Phase III to Phase IV of the EU ETS as all the required systems and processes are in place for the participants we assume within scope.
66. It is worth noting however, that a number of administrative simplifications have been proposed in a UK ETS compared to existing arrangements in the EU ETS, such as streamlined MRV of emissions (see Chapter 2 for more detail). These simplifications could result in overall administrative cost savings to UK ETS participants relative to the counterfactual (in addition to reducing the administrative burden faced by the scheme regulators).

Administrative Costs to Government (including Regulators)

67. Administrative costs are also incurred by the governments and regulators, in setting up and operating a UK ETS or administering Phase IV of the EU ETS in the UK. This includes costs associated with staff pay, activities carried out by the regulators and the development of the necessary IT systems required to support the functioning of the system.
68. We expect the administrative costs to government (including regulators) to be greater under a linked and standalone UK ETS compared to the counterfactual. This is primarily due to the additional resource and activity required to establish a UK ETS. Once operating, we do not expect any significant difference in administrative cost to government and regulators in the UK ETS scenarios relative to the counterfactual.

Air Quality Benefit to Society

69. Many of the activities within scope of the EU ETS (and proposed UK ETS) release air pollutants into the atmosphere in addition to greenhouse gases, such as nitrogen oxides (NO_x), sulphur dioxide (SO₂), and particulate matter (PM). These air pollutants can have a significant negative impact on human health and well-being, productivity, and the local environment.⁸⁰
70. There are therefore potentially significant further benefits from implementing a UK ETS to the extent that the policy leads to reduction or cessation of activities that generate both in-scope emissions and out-of-scope air pollutants.

⁸⁰<https://www.gov.uk/government/publications/clean-air-strategy-2019>.

71. Relative to the counterfactual, we expect the size of this benefit to be the same in a linked UK ETS (where the same level of abatement is achieved). However, to the extent that a tighter cap in a standalone UK ETS delivers more abatement in the UK we assume this leads to greater improvements in air quality relative to the counterfactual.

Wider Economic Impacts

72. One of the key aims of an ETS is to incentivise permanent abatement through the investment in and deployment of low-carbon technologies. Beyond the direct benefit to society from the resulting emissions reductions, there is also the potential for positive spill-overs arising from this increase in low-carbon investment. This includes driving further R&D and innovation in the UK and the benefits in terms of economic growth and employment that may result.
73. There is evidence to support the theory that higher carbon costs trigger more innovation and greater investment in low-carbon technologies, which could lead to reductions in overall production costs and boost industrial competitiveness.⁸¹
74. There is also the potential for positive impacts on economic growth and employment resulting from the development of secondary markets for allowance trading and continuation of the UK's role as a hub for climate finance expertise.
75. Evidence suggests increased activity by financial intermediaries in the EU ETS since the recent price increase that has been experienced in the EU carbon market.⁸² Whilst it is not necessarily the case that financial activity in a UK ETS is or will be driven by the price level, it is likely that financial interest will be responsive to future expectations about the carbon price that a tighter cap may send to market participants.
76. Thus to the extent that a UK ETS delivers more UK abatement relative to the counterfactual, we expect a net positive benefit to the wider economy.

Industrial Competitiveness Impacts

77. Industrial competitiveness depends on several factors, including energy costs, labour costs (and the costs associated with other factors of production), resource availability and the wider policy landscape. This means that changes in carbon costs as a result of an ETS may not be the most significant determinant of competitiveness for sectors within scope of the policy. Moreover, while in theory higher carbon costs could crowd out other productive investments (and in turn affect the competitiveness of UK producers) there is evidence to suggest that higher carbon costs could in fact have the opposite effect.
78. Nevertheless, relative to the counterfactual, a linked UK ETS (with the same carbon price and design in respect of allocation of allowances) is not expected to cause any significant competitiveness impacts.
79. A more environmentally ambitious standalone UK ETS that results in higher carbon prices could negatively impact the economic performance and trade competitiveness of UK businesses relative to the counterfactual – though this would be mitigated to some extent for participants who receive relatively more freely allocated allowances.

⁸¹ Calel, R., and Dechezlepetre, A. (2012). *Environmental policy and directed technical change: Evidence from the EU carbon market*. Grantham Institute, LSE.

⁸² <https://www.ft.com/content/6e60b6ec-b10b-11e8-99ca-68cf89602132>

Electricity Market Impacts

80. The carbon price faced by fossil fuel electricity generators under the policy scenarios could impact the capacity and generation mix of technologies in the UK electricity system.
81. A tighter cap in a standalone UK ETS could lead to higher carbon prices in the system relative to a cap based on the UK's notional share of Phase IV. All else constant, higher carbon prices could increase the marginal cost of electricity generation from fossil fuel generators (e.g. coal and gas) relative to other technologies (e.g. nuclear and renewables) promoting the displacement of fossil fuel generators with other lower carbon technologies. This is an objective of the policy, but if the timing of fossil fuel plant closures and building of other technologies is not well aligned it could impact security of supply. Ensuring a stable carbon market is important to mitigate these risks.
82. To the extent that the carbon price in a UK ETS results in significantly higher UK electricity prices compared to the rest of Europe, the policy may also impact the flow of electricity imports and exports via interconnectors. Increased electricity imports from abroad via interconnection could help limit security of supply impacts arising from reduced profits to coal and gas plants referred to above but could also potentially reduce the profitability of domestic generation.
83. However, in a linked UK ETS where carbon prices are not expected to differ significantly from the counterfactual, we do not expect any significant competitiveness impacts in the electricity market.

Aviation Market Impacts

84. Including UK flights in a standalone UK ETS instead of the aviation EU ETS has the potential to impact on competition in the aviation market. Where the difference in compliance costs incurred by aircraft operators under a UK ETS compared to the counterfactual is significant (e.g. where the cap relative to the counterfactual is significantly tighter), this could increase the likelihood of a competitiveness impact.
85. Other things being equal, a higher carbon price will increase the carbon costs to aircraft operators flying on UK-EEA routes. If the cap in a UK ETS is tighter than the EU ETS, the free allocation to aircraft operators could also be reduced compared to the EU. This would mean that flight routes covered by a UK ETS (UK to EEA) face higher carbon costs than those in the EU ETS. To the extent that operators using different flight routes are in competition with each other, this could put operators with business models that involve more flights with UK destinations at a competitive disadvantage.
86. In the event of higher carbon costs on UK-EEA routes in a UK ETS, it is possible that UK hub airports could become more expensive to use compared to their EU competitors. For example, if there is a European flight involved, to hub in a non-UK airport may be less expensive than flying from a UK one (e.g. Madrid-Paris-Rio de Janeiro may be less expensive than Madrid-London-Rio de Janeiro). Higher carbon costs on UK flight routes could also result in increased cost pass-through to consumers in the form of increased passenger air fares.⁸³
87. In a linked UK ETS where carbon prices and allocation to aircraft operators are not expected to differ significantly from the counterfactual, we do not expect any significant competitiveness impacts in the aviation market.

⁸³ http://www.vivideconomics.com/wp-content/uploads/2015/03/Vivid_Econ_Aviation_Tickets.pdf

Consumer Impacts

88. Consumers of the goods and services produced by businesses within scope of an ETS may be impacted by the policy to the extent that carbon costs are passed through to the prices that they face for these goods and services.
89. Evidence suggests that power generators can pass through a high proportion of allowance price costs.⁸⁴ A relatively tighter UK ETS cap could lead to higher consumer energy bills to the extent that it results in higher wholesale electricity prices.
90. We recognise that the costs of complying with the EU ETS and CPS have an indirect impact on some energy intensive industries via the knock-on effect of the wholesale electricity price and increase in retail electricity prices. Eligible businesses can claim compensation for these indirect costs if deemed to have a negative impact on competitiveness.⁸⁵
91. We do not expect any significant consumer impacts in a linked UK ETS relative to the counterfactual.

Overall Societal Costs and Benefits

92. Overall, we expect a linked UK ETS to deliver largely the same societal costs and benefits relative to the counterfactual, though with small additional administrative costs that arise as a result of needing to establish a UK system that is then linked with the EU system.
93. With respect to a standalone UK ETS the net societal costs and benefits relative to the counterfactual will depend on the extent to which a similar carbon price level and level of abatement can be achieved.
94. If carbon prices and abatement in a standalone UK ETS are lower relative to the counterfactual, we expect there to be a resource cost saving to system participants but also lower benefits to society due to lower emissions reductions. Conversely, in a standalone UK ETS with a relatively tighter cap we may see higher resource costs relative to the counterfactual (due to more abatement effort and higher carbon prices in the system) but also greater benefits to society. As noted above, and irrespective of the level of the cap set, we expect administrative costs to participants and government to be greater in a standalone UK ETS relative to the counterfactual because it represents the establishment of a new system.
95. The extent to which a standalone UK ETS delivers an overall net positive impact on society relative to the counterfactual, ultimately depends on the relative value society places on reducing emissions and tackling climate change compared to the costs borne in achieving these emissions reductions.

Economic Transfers

96. There are some impacts of an ETS that are distributional rather than affecting the economy in net terms. These are relevant to consider in ensuring that a UK ETS satisfies our policy objective of achieving emissions reductions in the traded sector while also balancing this with consideration of the cost burden of the policy on the businesses within scope.

⁸⁴ Fabra, N., and Reguant, M. (2013). *Pass-through of emissions costs in electricity markets*. American Economic Review, 104(9).

⁸⁵ Please see further guidance on eligibility for Indirect Cost Compensation, as well as a list of eligible sectors here: <https://www.gov.uk/government/publications/eu-emissions-trading-system-compensation-for-indirect-costs-in-2013-to-2014-and-2014-to-2015-guidance>

97. In both the counterfactual and UK ETS scenarios, value is transferred from businesses to government through the purchase of allowances at auctions, as well as between businesses who buy or sell allowances to each other.
98. In respect of transfers to government, allowances are bought by stationary installations and aircraft operators and therefore represent a cost to businesses complying with the scheme. However, this cost is then directly offset by the revenues received by the government as the seller of these allowances at auction.
99. In the counterfactual, the UK auctions around 10% of the total number of Phase IV allowances available for auction. Being in a larger market in this scenario means that both UK and EU participants can purchase allowances at UK auctions. The same is true for a linked UK ETS, and therefore (on the assumption that the auction share of a linked UK ETS remains unchanged from the UK's Phase IV auction share) we expect a similar level of transfers between system participants and government as in the counterfactual.
100. However, in a standalone UK ETS, government revenue can only be gained from auctioning allowances to UK installations and operators. Revenue to government therefore depends on:
- a. The level of the cap in the system and the size of the auction share (in terms of the volume of allowances) associated with this cap; and
 - b. The overall scarcity of allowances in the system and the extent to which this results in higher carbon prices at auctions.
101. Compared to the counterfactual, a standalone UK ETS with the cap set around the UK's notional share of Phase IV could result in lower revenues to government as a consequence of the cap being above BAU emissions and no additional effort is required to meet the cap. This could dampen the demand for allowances, resulting in a surplus of allowances and low carbon prices.
102. The extent to which auction revenue may be greater in a standalone UK ETS with a tighter cap depends on the balance between the lower number of allowances available for auctioning and the higher carbon price driven by allowance scarcity. In terms of what this means for businesses purchasing these allowances, we expect different participants to be impacted to varying degrees in a tighter cap scenario:
- a. Power sector installations would likely face the biggest increase in cost given that they do not receive any free allocation, though this could be managed to some extent through hedging activities. Hedging is commonly practiced in the power sector, but in tighter cap scenarios with increased ambition resulting in higher carbon prices this may influence the size of hedged positions that market participants have the capacity to accumulate. This means that firms may need to adapt their price mitigation strategies from those that have been employed to date in the EU ETS.
 - b. Energy intensive industrial installations are expected to receive the same level of free allocation as in the counterfactual (though this may change in light of the CCC's advice). Those deemed at risk of carbon leakage would be shielded from the higher carbon costs to the extent that they receive free allocation – which may cover all, if not a significant proportion, of their emissions.⁸⁶ Industrial installations not assessed to be

⁸⁶ This depends on their efficiency, relative to their product (or appropriate fall-back) benchmark. More information is provided in Chapter 1 (see 'Free Allocation: UK ETS Proposals').

at risk of carbon leakage and consequently expected to face a reduction in their free allocation over the phase would, however, be relatively more exposed to higher carbon prices.

- c. Similarly, while we assume that aircraft operators receive the same level of free allocation as in the counterfactual, in tighter cap scenarios they will also be affected by higher carbon prices on their emissions above their free allocation.

- 103. Note that all free allowances held by eligible operators have a market value. As such, a higher carbon price is likely to result in an increased incentive for all operators, including those with free allocation, to reduce their emissions where cost-effective to do so and sell any unused allowances.
- 104. In respect of transfers between businesses, value is transferred from operators with higher marginal abatement costs to those with lower marginal abatement costs via the trading of allowances. This enables a cost-effective distribution of abatement effort under the cap.

Annex B – UK ETS Scope and Gas Coverage

Installations or parts of installations used for research, development and testing of new products and processes and installations exclusively using biomass will not be covered by a UK ETS.

A UK ETS will cover the following activities:

Activity	Greenhouse Gas
Combustion of fuels in installations with a total rated thermal input exceeding 20 MW (except in installations for the incineration of biomass, hazardous or municipal waste)	CO ₂
Refining of mineral oil	CO ₂
Production of coke	CO ₂
Metal ore (including sulphide ore) roasting or sintering, including palletisation	CO ₂
Production of pig iron or steel (primary or secondary fusion) including continuous casting, with a capacity exceeding 2,5 tonnes per hour	CO ₂
Production or processing of ferrous metals (including ferro-alloys) where combustion units with a total rated thermal input exceeding 20 MW are operated. Processing includes, inter alia, rolling mills, re-heaters, annealing furnaces, smitheries, foundries, coating and pickling	CO ₂
Production of primary aluminium	CO ₂ and Perfluorocarbons
Production of secondary aluminium where combustion units with a total rated thermal input exceeding 20 MW are operated	CO ₂
Production or processing of non-ferrous metals , including production of alloys, refining, foundry casting, etc., where combustion units with a total rated thermal input (including fuels used as reducing agents) exceeding 20 MW are operated	CO ₂
Production of cement clinker in rotary kilns with a production capacity exceeding 500 tonnes per day or in other furnaces with a production capacity exceeding 50 tonnes per day	CO ₂
Production of lime or calcination of dolomite or magnesite in rotary kilns or in other furnaces with a production capacity exceeding 50 tonnes per day	CO ₂
Manufacture of glass including glass fibre with a melting capacity exceeding 20 tonnes per day	CO ₂
Manufacture of ceramic products by firing, in particular roofing tiles, bricks, refractory bricks, tiles, stoneware or porcelain, with a production capacity exceeding 75 tonnes per day	CO ₂
Manufacture of mineral wool insulation material using glass, rock or slag with a melting capacity exceeding 20 tonnes per day	CO ₂

Drying or calcination of gypsum or production of plaster boards and other gypsum products, where combustion units with a total rated thermal input exceeding 20 MW are operated	CO ₂
Production of pulp from timber or other fibrous materials	CO ₂
Production of paper or cardboard with a production capacity exceeding 20 tonnes per day	CO ₂
Production of carbon black involving the carbonisation of organic substances such as oils, tars, cracker and distillation residues, where combustion units with a total rated thermal input exceeding 20 MW are operated	CO ₂
Production of nitric acid	CO ₂ and N ₂ O
Production of adipic acid	CO ₂ and N ₂ O
Production of glyoxal and glyoxylic acid	CO ₂ and N ₂ O
Production of ammonia	CO ₂
Production of bulk organic chemicals by cracking, reforming, partial or full oxidation or by similar processes, with a production capacity exceeding 100 tonnes per day	CO ₂
Production of hydrogen (H ₂) and synthesis gas by reforming or partial oxidation with a production capacity exceeding 25 tonnes per day	CO ₂
Production of soda ash (Na ₂ CO ₃) and sodium bicarbonate (NaHCO ₃)	CO ₂
Capture of greenhouse gases from installations for the purpose of transport and geological storage in a storage site	CO ₂
Transport of greenhouse gases by pipelines for geological storage in a storage site	CO ₂
Geological storage of greenhouse gases in a storage site	CO ₂

Annex C – Proposed Changes to Penalties for Phase IV and a UK ETS

The following are the proposed changes to EU ETS penalties in the UK for Phase IV referred to in Chapter 4 of this consultation. These changes would also apply to the penalty framework in the implementation of a standalone or linked UK ETS. To note that while the 2012 GHG Regulations set the maximum penalty applicable for each of these breaches, ultimately the implementation of these penalties may differ slightly according to regulator discretion and the specific enforcement and sanctions policy adopted by each administration and corresponding regulator.

Regulation	Breach	Proposals
52 Carrying out a regulated activity contrary to regulation 9	<p>(1) Where in any scheme year a regulated activity is carried out that is not authorised by a permit, contrary to regulation 9, the operator of the installation ("P") is at the end of that year liable to the civil penalty in paragraph (2).</p> <p>(2) Subject to paragraph (3), for each such year, the civil penalty is where —</p> <p style="text-align: center;">$A + (B \times C)$</p> <p>A is the estimated amount of the costs avoided by P in that year as a result of carrying out a regulated activity without such authorisation; B is the estimated amount of reportable emissions from the installation in the period during which a regulated activity was carried out without such authorisation; C is the carbon price for that year.</p> <p>[(3) In imposing the penalty under paragraph (2), the regulator may increase the amount determined under that paragraph by a percentage designed to ensure that the penalty exceeds the amount of any economic benefit that P has obtained as result of the failure to comply with regulation 9.</p> <p>(4) The authority must exercise powers under section 40 of the Environment Act 1995, article 11 of the NRBW Order or regulation 37 of the Northern Ireland Regulations to give the regulator directions as to—</p> <p>(a) the estimation by the regulator of A and B in paragraph (2); and (b) the exercise of the regulator's powers under paragraph (3).</p>	<p>We propose to increase the element of the penalty (3) which allows regulators to increase the penalty amount by a percentage from 5% to 10%.</p> <p>This proposal is based on evidence from our practical application of issuing this penalty. The penalties issued have only marginally exceeded the economic benefit of the breach and are considered too low to be punitive.</p> <p>The change will be implemented by updating the Secretary of State / DA Direction to the regulators.</p>

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Regulation	Breach	Proposals
53 Failure to comply with a condition of a permit	<p>(1) An operator is liable to the civil penalties in paragraph (3) where the operator fails to comply (or comply on time) with a condition of a permit included pursuant to—</p> <p>(a) paragraph 2(1)(e)(ii) or (iv) of Schedule 4 (but excluding the condition mentioned in paragraph (4) below);</p> <p>(b) paragraph 3(1)(g), (h) or (i) of Schedule 5; or</p> <p>(c) regulation 10 of the 2005 Regulations, other than regulation 10(3) and (4) (or such a condition as modified by virtue of regulation 88(6) or (7) of these Regulations).</p> <p>(2) However, an operator is not liable to those civil penalties where the failure to comply gives rise to a penalty under regulation 57.</p> <p>(3) The civil penalties are—</p> <p>(a) £3,750; and</p> <p>(b) £375 for each day that the operator fails to comply with the condition following service of a penalty notice, up to a maximum of £33,750.</p> <p>(4) An operator is liable to a civil penalty of £5,000 where the operator fails to comply with a condition of a permit included pursuant to paragraph 2(7)(a) of Schedule 4.</p>	<p>We propose to increase the penalty to make it more effective, dissuasive, and proportionate to the seriousness of the breach, when assessed in line with updated enforcement and sanctions policies (See Chapter 4, section E of this consultation). The maximum penalty that can currently be issued does not give much scope to apply appropriate discretion, to separate out the serious breaches (such as failing to monitor emissions or submitting a verified report on time) from those less serious (such as not notifying the regulator of a minor administrative change).</p> <p>We propose to increase the initial penalty to:</p> <p>£20,000; and</p> <p>£500 for each day that the operator fails to comply with the condition following service of a penalty notice, up to a maximum of £45,000.</p> <p>In anticipation of the notification requirements regarding production level changes in Commission legislation (see Chapter 4, section B), we propose a penalty of £5,000 where an operator fails to notify us of changes which may affect its free allocation. This is the same penalty level that currently applies to the failure to notify us of partial cessations or significant capacity reductions (although capacity reductions are not applicable in Phase IV).</p> <p>We are proposing the same change to Regulation 62 – if both changes to Regulations 53 and 62 are made, then there will be parity between the penalty for failure to comply with a condition of a permit for installations and an aviation emissions plan.</p>
54 Failure to surrender allowances	<p>(1) A person (“P”) is liable to the civil penalty in paragraph (2) where P fails to surrender sufficient allowances, contrary to [regulation 41 or regulation 42A</p> <p>(2) The civil penalty (“excess emissions penalty”) is the sterling equivalent of 100 Euros for each allowance that P failed so to surrender.</p> <p>(3) But paragraph (1) is subject to paragraphs (4) to (6).</p> <p>(4) Where paragraph (5) applies, P is not liable to the excess emissions penalty for a failure to surrender allowances in respect of those reportable emissions in a scheme year that—</p> <p>(a) were not reported in the verified emissions report submitted for that year, but</p> <p>(b) have been determined by the regulator following a request under paragraph (5)(b).</p> <p>(5) This paragraph applies where P, before the regulator serves on P a penalty notice imposing an excess emissions penalty in respect of</p>	<p>We propose to make amendments to Regulation 54 of the 2012 GHG Regulations to reflect a judgment of the CJEU.³⁶ The judgement clarified that the mandatory €100 per tCO₂eq penalty in the Directive (Article 16(3)) does not apply in circumstances where an operator or aircraft operator initially surrendered enough allowances to cover their verified emissions, but it is subsequently discovered that there has been an error in original verified emissions.</p> <p>The court ruled that in these cases Member States have discretion to determine what penalty should be imposed in line with Article 16(1); that such penalties should be effective, proportionate and dissuasive.</p>

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Regulation	Breach	Proposals
	<p>emissions in that scheme year (or a notice of the regulator's intention to do so) —</p> <p>(a) notifies the regulator that there are annual reportable emissions not included in the report that has been submitted for that year,</p> <p>(b) requests the regulator to make a determination of the annual reportable emissions for that year, and</p> <p>(c) has surrendered allowances equal to the reportable emissions as so determined.</p> <p>(6) Where paragraph (5) applies, P is liable to the civil penalty of the sterling equivalent of 20 Euros for each allowance that P failed to surrender in respect of the unreported emissions by the relevant date.</p>	<p>We believe that the 2012 GHG Regulations, as currently drafted, do not fully reflect the CJEU's judgement⁸⁷ outlined above. The mandatory €100 per tCO₂eq penalty under Regulation 54(2) currently applies to the failure to surrender allowances equal to "annual reportable emissions" (which is actual emissions rather than verified emissions) and the €20 per allowance penalty is framed as an exception to this mandatory penalty where certain conditions (detailed in Regulation 54) are met. However, these conditions do not fully align with the CJEU's judgement; specifically, to achieve alignment, there should be no requirement for the operator to self-report the error or surrender the deficit of allowances before the following 30 April in order to qualify for the reduced penalty.</p> <p>To address this, we propose that the wording of Regulation 54 be amended. The mandatory penalty of €100 would apply only to a failure to surrender allowances equal to verified annual reportable emissions by the relevant deadline. A separate penalty would be applied where subsequent errors in verified emissions reports are discovered by the regulator or operator/aircraft operator. We propose that this penalty remains at the sterling equivalent of €20 per allowance as currently set out in the 2012 GHG Regulations (Regulation 54(6)) and that the regulator take into account the behaviour of the operator as well as its good faith or fraudulent intentions. The regulations would also be amended to set out a process for the operator or aircraft operator to correct the error and surrender the deficit of allowances.</p> <p>These changes would bring UK legislation in line fully with the relevant EU legal judgement.</p>
<p>55</p> <p>Exceeding an emissions target for an excluded installation</p>	<p>(1) An operator of an excluded installation is liable to the civil penalty in paragraph (2) where in any scheme year the operator fails to comply with paragraph 5 of Schedule 5.</p> <p>(2) The civil penalty is</p> <p>$(A - B) \times C$</p> <p>where—</p> <p>A is the amount of annual reportable emissions arising in the scheme year;</p> <p>B is the emissions target for that year;</p> <p>C is the carbon price for that year.</p>	<p>Where an Article 27 or 27a scheme is introduced (in Phase IV or a UK ETS, as appropriate), we propose applying this penalty as currently set out (or, in the case of Article 27a, as set out in Chapter 4, section D of the consultation). However, the regulator discretion to waive or reduce the penalty will be limited to circumstances where the emissions target is found to be incorrect. Chapter 4, section C of the consultation outlines this in more detail.</p> <p>The regulations will also be amended to allow this penalty to be applied to installations on the Article 27a Scheme who notify their regulator, within three months of the end of a reporting year, that they have emitted over 2,500t CO₂eq in that year. These installations will have to pay the relevant civil penalty for every tCO₂eq over the 2,500 limit, and then be entered into the main EU ETS or Article 27 Scheme. For more detail please see Chapter 4 section D of the consultation document.</p>

⁸⁷ <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:62014CJ0148&from=EN>

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Regulation	Breach	Proposals
57 Under-reporting of emissions from an excluded installation	<p>(1) An operator of an excluded installation is liable to the civil penalty in paragraph (2) where there are reportable emissions in a scheme year (“the unreported emissions”) that—</p> <p>(a) were not reported in the report submitted for that year under paragraph 3(8)(b) of Schedule 5; but</p> <p>(b) have been determined by the regulator under regulation 44(3).</p> <p>(2) The civil penalty is</p> <p>$A + (B \times C)$</p> <p>where—</p> <p>A is £3,750;</p> <p>B is the amount of the unreported emissions;</p> <p>C is the carbon price for that year.</p>	We propose to increase the penalty value for “A” to £5,000. This increase will make the penalty more effective and proportionate.
58A and 58B A - Failure to notify when an excluded installation has had a significant capacity reduction or partial cessation of regulated activities B - Failure to notify when an excluded installation has suspended the carrying out of regulated activities at the installation	<p>A - An operator is liable to a civil penalty of £5,000 where the operator fails to comply with a notification requirement under paragraph 7(2) or 9(2) of Schedule 6A.</p> <p>B - An operator is liable to a civil penalty of £3,750 where the operator fails to comply with a notification requirement under paragraph 8(10) or Schedule 6A.</p>	<p>A - As detailed in Chapter 4 section B (Tertiary Legislation) these penalties will need to be updated to reflect the new approach to allocation changes in Phase IV. Discussions on these measures have not yet been finalised, but we propose that these penalty levels will continue to apply to the equivalent notification failures in Phase IV.</p> <p>B - These notification requirements are relevant where an excluded installation returns to the EU ETS. We propose that the penalty levels which currently apply to these notification failures should apply to similar failures in Phase IV.</p>
60 Failure to submit or resubmit an application for an emissions plan	<p>(1) [Subject to paragraphs (3) and (4), a UK administered operator] 1 (“A”) is liable to the civil penalties in paragraph (2) where A fails to—</p> <p>(a) submit (or to submit on time) an application for an emissions plan, contrary to [regulation 32(1), 32A(2) or 32B(2)] 2 ; SI 2012/3038 Page 58</p> <p>(b) provide a satisfactory explanation, contrary to [regulation 32(4), 32A(3)(b), 32A(5)(b), 32B(3)(b) or 32B(5)(b)] 3 ; or</p> <p>(c) resubmit (or to resubmit on time) an application for an emissions plan, where required to do so by regulation 34(4).</p> <p>(2) The civil penalties are—</p>	<p>We propose to have the penalties increased to:</p> <p>£20,000; and</p> <p>£500 for each day that A fails to comply with the condition following service of a penalty notice, up to a maximum of £45,000.</p> <p>This is to ensure that the penalty remains proportionate and gives regulators the flexibility to exercise their discretion to ensure the EU ETS enforcement regime remains effective (See chapter 4, section E of the consultation).</p>

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Regulation	Breach	Proposals
	(a) £1,500; and (b) £150 for each day that the application or resubmission of an application is not provided, following the service of a penalty notice, up to a maximum of £13,500.	
62 Failure to comply with a condition of an emissions plan	(1) A UK administered operator ("A") is liable to the civil penalties in paragraph (2) where A fails to comply (or to comply on time) with a condition in an emissions plan, contrary to regulation 36(2). (2) The civil penalties are— (a) £1,500; and (b) £150 for each day that A fails to comply with the condition following the service of a penalty notice, up to a maximum of £13,500.	We propose to increase the penalty in Regulation 62(2) to: £20,000; and £500 for each day that A fails to comply with the condition following service of a penalty notice, up to a maximum of £45,000. This is to ensure that the penalty remains proportionate and gives regulators the flexibility to exercise their discretion to ensure the EU ETS enforcement regime remains effective (See chapter 4, section E of the consultation). We are proposing the same change to Regulation 53 – if both changes to Regulations 53 and 62 are made, then there will be parity between the penalty for failure to comply with a condition of a permit for installations and an aviation emissions plan.
63 Failure to monitor aviation emissions	(1) [Subject to paragraph (3), a UK administered operator ("A") is liable to the civil penalties in paragraph (2) where A fails to monitor aviation emissions, contrary to regulation 35(1). (2) The civil penalties are— (a) £1,500; and (b) £150 for each day that A fails to monitor aviation emissions following the service of a penalty notice, up to a maximum of £13,500.	As above (see changes proposed to Regulations 53, 60 and 62), we propose to increase the penalties to: £20,000; and £500 for each day that A fails to monitor aviation emissions following service of a penalty notice, up to a maximum of £45,000.
64 Failure to report aviation emissions	(1) Subject to paragraph (3), a UK administered operator ("A") is liable to the civil penalties in paragraph (2) where A fails to report (or to report on time) aviation emissions, contrary to— (a) for the scheme year 2013, regulation 35(8); or (b) for any other scheme year, regulation 35(4). (2) The civil penalties are— (a) £3,750; and (b) £375 for each day that the report is not submitted, following the service of a penalty notice, up to a maximum of £33,750.	As above (see changes proposed to Regulations 53, 60, 62 and 63), we propose to increase the penalties to: £20,000; and £500 for each day that the report is not submitted following service of a penalty notice, up to a maximum of £45,000.
67	(1) An operator or a UK administered operator ("P") is liable to the civil penalties in paragraph (2) where P—	This will need to be updated following the conclusion of discussions on allocation changes: see above proposals relating to 58A and 58B.

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Regulation	Breach	Proposals
Failure to return allowances	<p>(a) receives allowances or aviation allowances to which P is not entitled; and</p> <p>(b) fails to return (or return on time) such allowances or aviation allowances, contrary to—</p> <p>(i) paragraph 11(4) of Schedule 6 ; [...]</p> <p>(ia) paragraph 12(4) of Schedule 6A; or</p> <p>(ii) paragraph 10(4) of Schedule 7.</p> <p>(2) The civil penalties are—</p> <p>(a) £20,000; and</p> <p>(b) £1,000 for each day that P fails to return the allowances following the service of a penalty notice.</p>	
69 Failure to comply with an information notice	<p>(1) A person ("P") is liable to the civil penalties in paragraph (2) where P fails to comply (or to comply on time) with the requirements of an enforcement notice, contrary to regulation 43(4).</p> <p>(2) The civil penalties are—</p> <p>(a) £20,000; and</p> <p>(b) £1,000 for each day that P fails to comply with the requirements of the enforcement notice, following service of a penalty notice, up to a maximum of £30,000.</p>	We propose to increase the penalty to £5,000 and a daily penalty of 500 per day. This ensures that the penalty remains dissuasive and proportionate and aligns this penalty with penalties for similar breaches in other climate change schemes (i.e. ESOS).
70 Providing false or misleading information	<p>(1) A person ("P") is liable to the civil penalty in paragraph (2) where P provides false or misleading information, or makes a statement which is false or misleading in a material particular, where the statement is made or the information is provided—</p> <p>(a) in any application made under these Regulations, or in response to a notice served under paragraph 1(12) of Schedule 3;</p> <p>(b) in a notice under regulation 33(1)(b);</p> <p>(c) in an aviation emissions report prepared under regulation 35(3); (d) in response to a notice served under regulation 45(2);</p> <p>(e) pursuant to a requirement mentioned in regulation 80(2) or (4);</p> <p>(f) in purported compliance with the conditions of a permit or an aviation emissions plan;</p> <p>(g) pursuant to paragraph 6(2), 8(4)(a), or 8(5)(a) of Schedule 6; or (h) pursuant to paragraph 7(2) or 9(2) of Schedule 6A.</p> <p>(2) The civil penalty is £1,000.</p>	We propose to increase the penalty to £50,000, to reflect the seriousness of any intentional provision of misleading information and align with similar breaches in other climate change schemes (i.e. ESOS). As with other penalties, regulator discretion would apply.

This consultation is available from <https://www.gov.uk/government/consultations/the-future-of-uk-carbon-pricing>

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